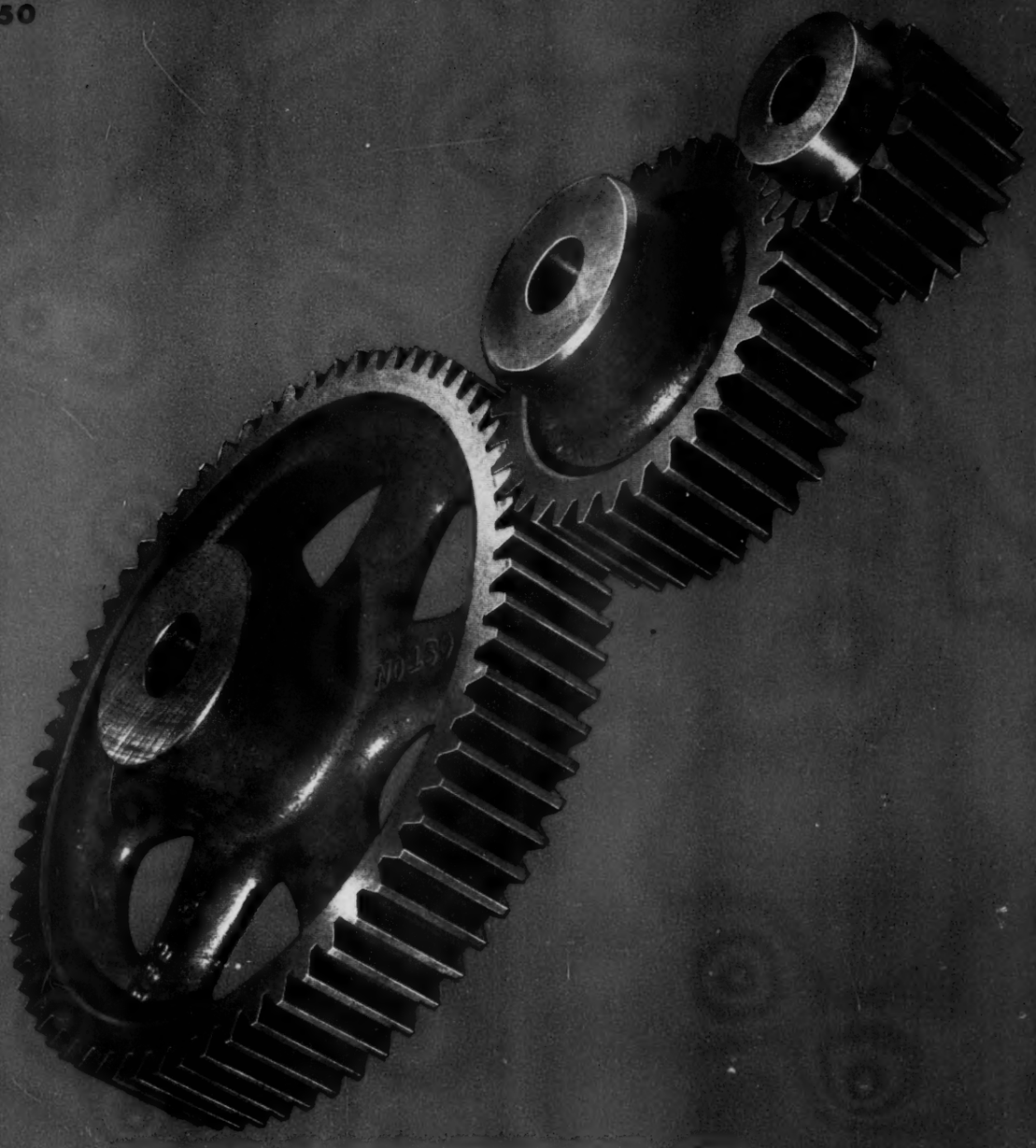
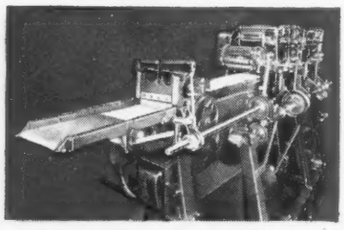
APRIL 1950



PRINTING EQUIPMENT *Engineer*



50 years young! ... and still growing!!

As we observe our 50th Anniversary, it is good to know that the first New Era Multi-Process Press built is still rendering faithful and efficient service ... after a half-century.

We like to believe that as an organization ... NEW ERA is still young and growing ... that our past achievements are only stepping stones to still greater accomplishments...and that we have built more than just good presses.

With the help of such priceless intangibles as integrity ... and the friendship and goodwill of customers ... we will continue to build only the finest equipment ... that will grow in service and dependability.

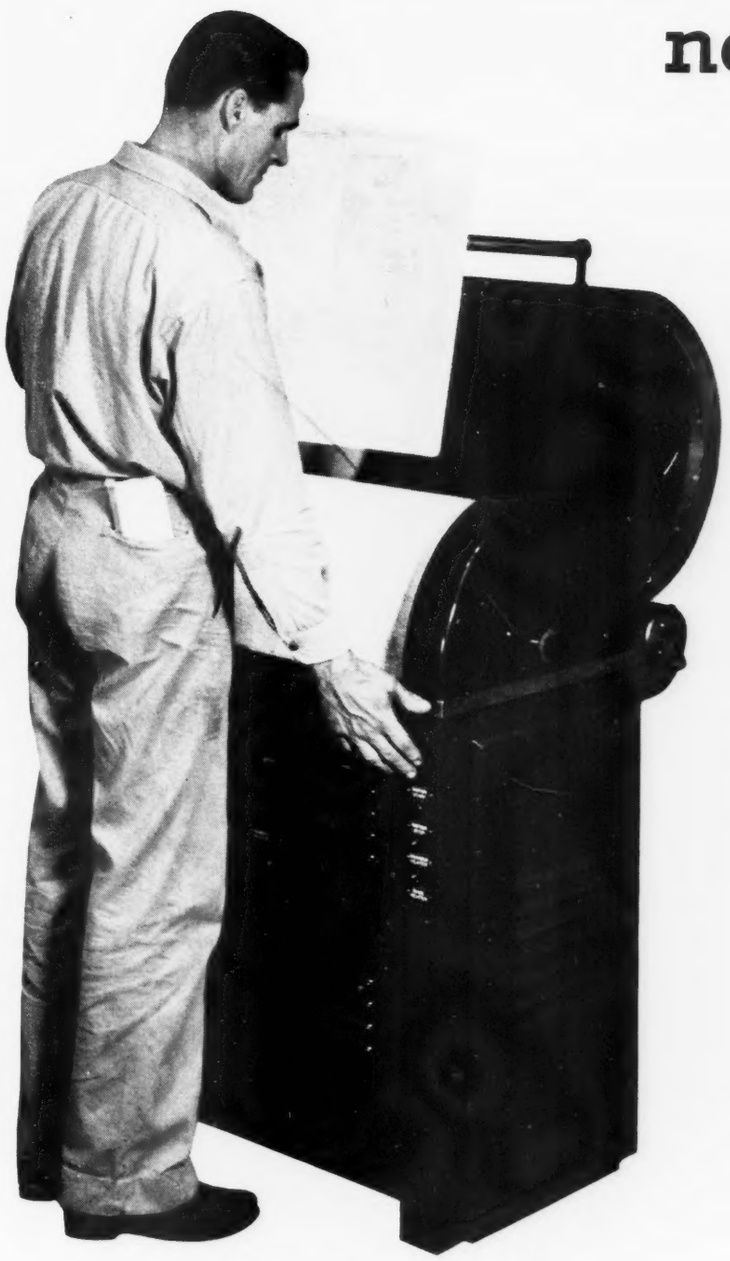
Attractive Three-Color Booklet Commemorating The Golden Anniversary of New Era Manufacturing Co. Available on Request.

1900 — BUILDING BETTER PRESSES FOR HALF-A-CENTURY — 1950

NEW ERA MANUFACTURING COMPANY 375 - 11th Ave., Paterson 4, N. J.

6354

want a better-printed newspaper?



THE STA-HI MASTER FORMER

- Then give your stereotype crew one of the "basic tools" that makes better printing possible: the Sta-Hi Master Former.
- Your composing room can deliver a page form perfect in every detail. Your pressroom can be equipped with the best machinery, manned by skilled craftsmen willing and able to turn out a fine job.
- But unless the vital transfer from form to dry mat to plate is made with precision, your printed product will fall short of your expectations.
- The Sta-Hi Master Former assures control of shrinkage, eliminates buckles, electrically bakes and vacuum forms the mat to casting radius. It turns out better mats, which mean better plates and better printing. And it does all this automatically!
- Let us tell you how the Master Former can sharpen up the appearance of **your** newspaper — and save you valuable production time and expense. Write for details today!

STA-HI

SUPERIOR NEWSPAPER PRODUCTION MACHINERY

STA-HI CORPORATION • 235 W. WASHINGTON BLVD. • WHITTIER, CALIF.

Nation's Finest Trade Bookbinders Write Extolling the New 30x46...60 BAUMFOLDER

PRACTICAL BOOKBINDING, N.Y.C., says:
"Best money-maker in our plant."

PRINTERS FINISHING, Baltimore, says:
"Set-up time reduced to minimum . . .
PRODUCTION SURPASSED WILDEST DREAMS."

DEPENDABLE BINDERY, N.Y.C., says:
"Additional speed makes investment well worth while."

GRAPHIC ARTS FINISHING, Baltimore, says:
"Makes more folds than any other, which is IMPORTANT to a TRADE bindery."

J & A BINDERY, N.Y.C., says:
"Puts out work faster than other and is priced far below competitors."

SOUTHWEST, Texarkana, Ark., says:
"You claim 30" width but we fold 31" and operator has time for other nearby tasks."

VENIAR BINDERY, N.Y.C., says:
"Excellent performance in output and quality of work."

CUNEO, CHICAGO, says:
"We increased production and got better quality folding with spoilage nil."

PLYMOUTH BINDERY, N.Y.C., says:
"30 x 46 Baumfolder exceeded fondest expectation of accuracy and production."

Don't Delay . . .

don't delay ordering Your Gold Mine for All Time

ALTHOUGH our factory is working over-time . . . and every hour a precision-built Gold-Mine Baumfolder rolls off the assembly line, everywhere printers and/or bookbinders are ordering them faster than we can build them,—some days twelve orders, some days sixteen, etc. Now $300,000.00 of orders in AHEAD of "yours" . . . so don't delay.

Over 5,000 firms since V-E Day have ordered one or more . . . as it is the answer to some of today's production and economic and "profit" problems.

How MUCH is it costing you to do without it? It costs less than nothing to own it and dig gold daily . . . and is yours on 10% initial payment and a small share of the increased profits over 30 months.

No. 1 Gold-mine 14x20 five-fold . . . with Friction or Pile Feed.

No. 2 Gold-mine 17½x22½ seven-fold . . . with Friction, Suction-Pile or Suction-Continuous Feed.

No. 3 Gold-mine 22x28 either eight-fold or ten-fold . . . with Suction-Pile or Suction-Continuous Feed.

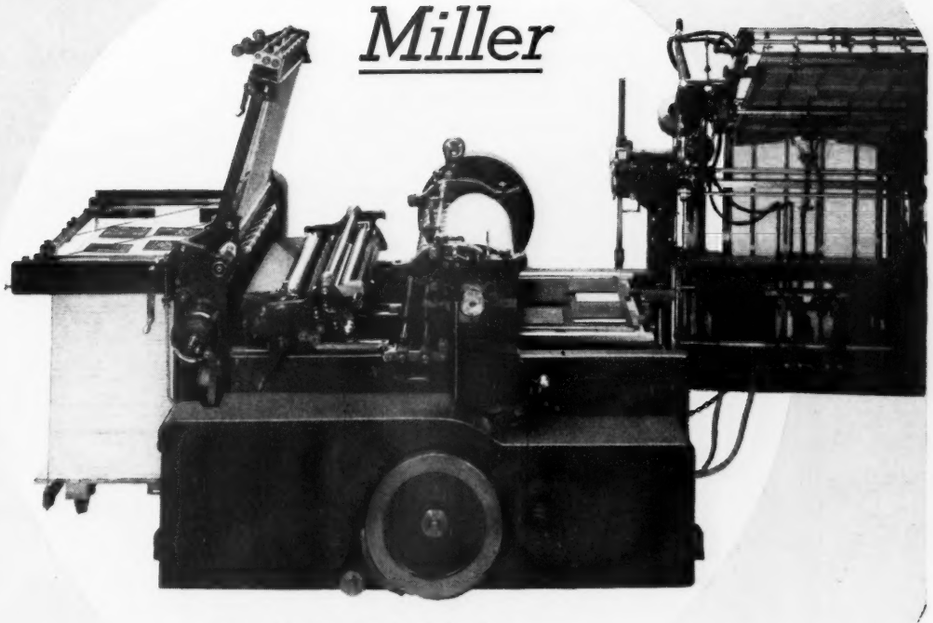
No. 4 Gold-mine 25x38 either 10, 11 or 12 fold . . . with either Suction-Pile or Suction-Continuous Feed.

No. 5 Gold-mine 30x46 . . . 60 . . . greatest versatility in folder history . . . 14 folding plates. Continuous feed preferable on this size.

RUSSELL ERNEST BAUM, Inc.

615 CHESTNUT ST., PHILADELPHIA 6, PA.

Miller



21 x 28 SW Single Color Letterpress

MILLER

Bed Size.....24 1/16" x 29"

Maximum Sheet.....21" x 28"

Maximum Size Form on Bed.....20¼" x 28"

Maximum Size Form in Chase..20¼" x 26"

Range of operating speeds.....2750 to 5000

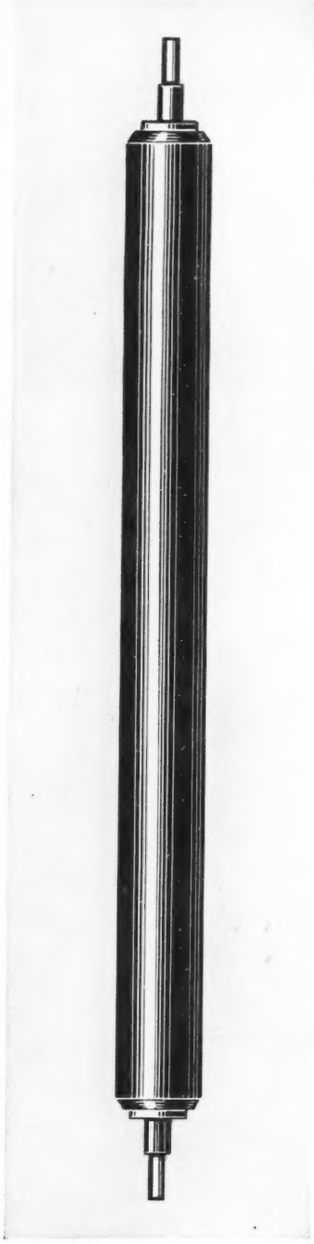
A press built for quality work, good production and long run endurance. Write and make arrangements for a demonstration.

This eight-page booklet which more fully describes this press is yours for the asking. Write today.

MILLER PRINTING MACHINERY CO., 1103 Reedsdale St., Pittsburgh 12, Pa.

OVER ONE HUNDRED YEARS OF ROLLER MAKING

SAM'L BINGHAM'S SON MFG. CO.



Manufacturers of

RUBBER • NON-MELTABLE • FABRIC COVERED
ROTOGRAVURE • OFFSET
COMPOSITION • VARNISH-LACQUER • GRAINING

ROLLERS

IT'S NOW TIME TO GET YOUR ROLLERS READY *for* SUMMER USE

SHIP YOUR OLD ROLLERS TO
THE FACTORY MOST CONVENIENT TO YOU

16 Modern Factories Serving Printers in 31 States

FACTORIES

ATLANTA 3
CHICAGO 5
CLEVELAND 14
DALLAS 1
DES MOINES 2
DETROIT 10
HOUSTON 6
INDIANAPOLIS 2

SAM'L BINGHAM'S SON MFG. CO.
MANUFACTURERS OF
PRINTERS' ROLLERS
LITHO-OFFSET ROLLERS

FACTORIES

KALAMAZOO 12
KANSAS CITY 6
MINNEAPOLIS 15
NASHVILLE 3
OKLAHOMA CITY 6
PITTSBURGH 3
ST. LOUIS 2
SPRINGFIELD, O.

Pacific Coast Sales Representative; THE CALIFORNIA INK CO., INC.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-2

PRINTING EQUIPMENT *Engineer*

A TECHNICAL MAGAZINE

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

APRIL 1950

EDITORIAL STAFF

MacD. SINCLAIR, *Editor*
DR. R. R. VOORHEES
Field Editor
ADAM HENRY REISER
Associate Editor
EDWARD H. OWEN
Assistant to the Editor

BUSINESS STAFF

DON WILL, *Publisher*

William L. Osborn, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone: MUrray Hill 6-5980.

Eugene A. Powers, Midwest Manager, 612 N. Michigan Ave., Chicago 11, Ill. Phone: SUperior 7-2444.

Volume 80 **Number 1**

PRINTING EQUIPMENT Engineer, Published monthly at 1276 West Third St., Cleveland 13, Ohio, Copyright 1950 by Willsea Publishing Co.

Acceptance under section 34.64 P. L. and R., authorized.

Subscription price per year, $3.50 in advance in U.S.A. Single copy current issues, 35c; feature issues $1 per copy; December Equipment and Supplies Catalog Issue $2 per copy in United States, $2.50 outside of United States. (U. S. currency). Subscriptions in foreign countries $4.50 (U. S. currency) in advance. Canadian printing plant mechanical and production executives receiving Printing Equipment Engineer under CCA regulations will be charged $1 postage per year in advance to cover additional postage to Canada.

Member Circulation CCA Controlled Audit

Printed in U. S. A.

LEADING ARTICLES FOR APRIL 1950

Books Received 20
The Story of Magnesium, 20
Controlled Humidity Method, 20

Rotary Press Infrared Ink Driers 29

Foundation of the R & E Council 31

Conveyor System and Proof Room in Newspaper Composing Room 32
JULIAN J. EBERLE

Revised List of Exhibitors—National Graphic Arts Exposition 35

Equipment and Supplies 36
Fire Hazard Index, 36
Round Hole Perforator, 36
Kodak Filter Data, 36
Registerscope Bulletin, 36
Carton Cutter and Creaser, 36
Mounting and Proving Machine, 36
Intertype Lydian Bold, 36
Kodak Process Ektar Lenses, 37
Announces Three Items, 37
Wire Stitcher Bulletins, 37
Materials Handling Booklet, 37
Expendable Pallets, 37
Silversheen Inks, 37
Craftsman Utility Table, 37
Saw-Trimmer, 38
Dry Spray Unit, 38
Humidity and Temperature Indicator, 38
Poly Automatic Press, 38
Bulmer Brochure and Specimen Sheets, 38
Tag Stringer and Knotter, 38
Foot Treadle Switch, 38
Rotary-Perforator-Scorer-Snapout Machine, 38
Job Cost and Payroll Recorder, 38
Apex Imprinting Press, 39
Expandable Binder, 39
ATF Foundry Type Booklet, 39
Numbering Machine Catalog, 39
I. S. Lift Jogger, 39
Hammond Pig Molder, 39
High-Lift Truck, 39
Magnesium Products, 39
Vibration Control Bulletin, 39
Portable Exposing Unit, 42
"Extra-Depth" Engravings, 59
Pocket Microscope, 59
Layflat Paste, 59
Color Copy-Lighting Lamps, 60
G-E Bulb for Ceiling Fixtures, 60

The ABC of Offset—III and IV . 40
GEORGE JOS. LENZER

Exposition Previews 43

New Era Mfg. Co. Observes Golden Anniversary 44

ANPA Exhibit Previews 46

Work Simplification Equipment . 48

Conference Dates Box 50

Work Simplification Notes 51

Patents For the Graphic Arts . . . 52

Salvage of Silver Waste 70
M. S. KANTROWITZ

Manual of Stereotyping

By Joseph D. Goggin

•

The essential factors of stereotyping — equipment, materials, and manipulation—are discussed in this 256 page manual by a man who has had extensive practical experience and study in the process. The all-important preparation of the form from which the mold is to be made and the molding and casting procedures are thoroughly explained from the standpoint of the requirements of the process. A Glossary and Encyclopedia gives definitions of terms used by stereotypers.

$5.25 per copy
Postpaid in U.S.A. only

PRINTING EQUIPMENT Engineer
1276 W. 3rd St. Cleveland 13, O.

PRINTING EQUIPMENT *Engineer* is an

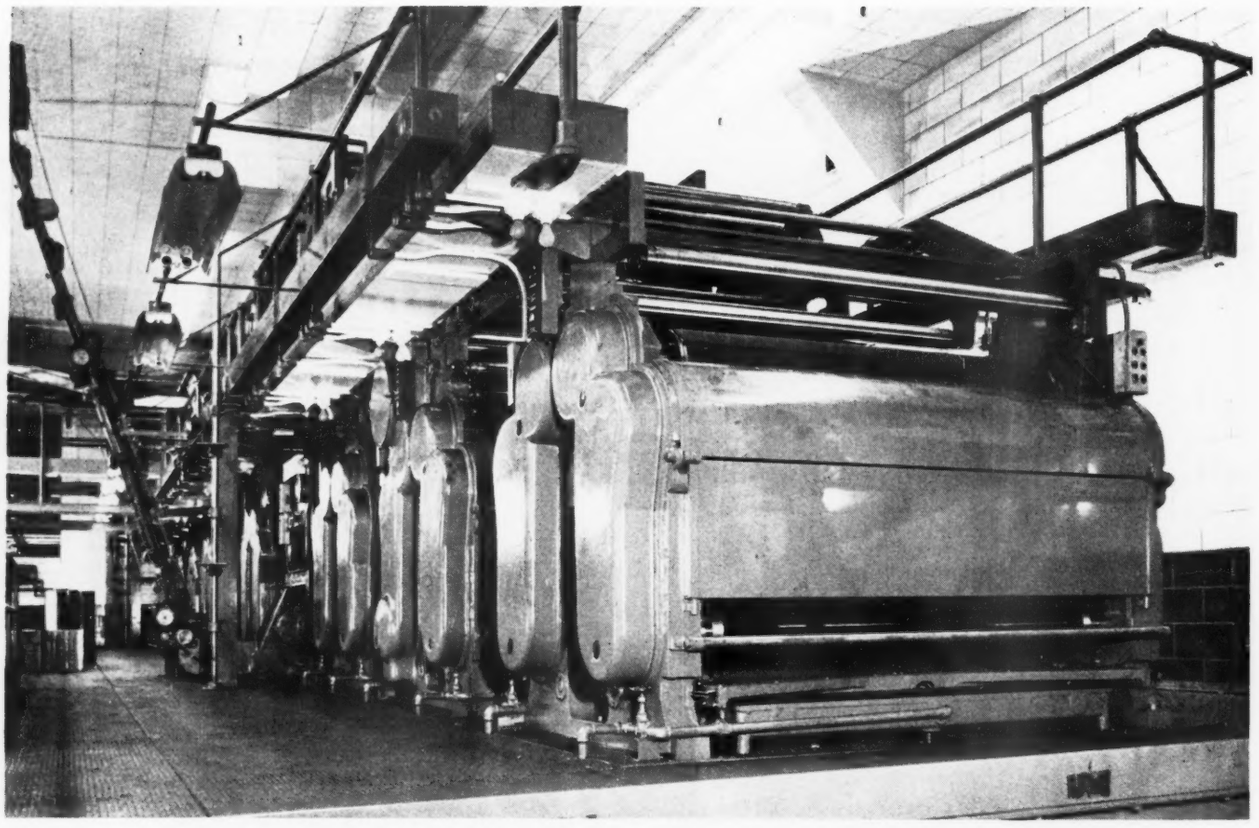
EXHIBITOR

GRAPHIC ARTS EXPOSITION

CHICAGO-SEPTEMBER 11-23-1950

GOOD RESULTS

are easily obtained on the SCOTT *Newspaper Press*



Typical recent installation showing 10 units and 2 pairs of folders at the *Milwaukee Sentinel.*

The SCOTT is the pressmen's press—universally liked and respected for its ability to out-perform all others

WALTER SCOTT & CO., INC.

PLAINFIELD, N. J.

Another Member of the Ludlow Tempo Family

Ludlow *Tempo Bold Condensed Italic* is another member that has recently been added to the justly popular Tempo typeface family, and it will be available in sizes from 18 point to 72 point inclusive.

- Ludlow Tempo is a sans-serif letter of real distinction, and has made its own place among typefaces that will be with us for a long time. Its continuing popularity among the most particular printers, typographers and advertisers is no accident.

- The Tempo family now comprises *fifteen* attractive series, in a varied selection of faces, sizes and weights, from the dainty and graceful Tempo Light to the bold and rugged Tempo Black. Complementary italic and condensed faces are included. In addition there are large Tempo price figures, as well as superior figures, adapted to practically any typographic set-up.

- With Ludlow Tempos the printer is able to produce effective commercial and miscellaneous composition and advertising typography in up-to-the-minute style.

- Specimen sheets showing any Ludlow Tempo typeface gladly sent on request, without obligation.

LUDLOW TYPOGRAPH COMPANY
2032 Clybourn Avenue Chicago 14, Illinois

Light & *Light Italic*

Medium and *Medium Italic*

Medium Condensed

Bold and *Bold Italic*

Bold Condensed *and Italic*

Heavy Condensed *and Italic*

Heavy and *Italic*

Black & INLINE

RAISE YOUR SIGHTS

WITH THE NEW KELLY THREE

Aim at the work that brings you both profit and prestige

Printing books, advertising folders, broadsides and brochures, periodical publications, that's where the money and the glory grow. Fine halftone work and process color, that build up your name as tops in the craft! The handsome new streamlined Kelly Three puts you into this upper-bracket 25″x38″ class with advantages no comparable press can offer you. Its cost-saving 25″x37″ sheet lets you run sixteen 6″x9″ pages, or eight 9″x12″ pages with ample trim, but spares you the waste of a larger sheet that would spill your profits into the paper baler. Low cost per thousand highest quality impressions pour off this press at speeds up to 3500 an hour: easy cruising at 3000 on certain stocks. There's a new sturdy stability from a lower center of gravity that practically eliminates makeready-shifting vibration; operator satisfying accessibility; steel safety plates protecting both sides; and a score of cost-cutting operating features that make the new Kelly Three a honey of a profit producer.

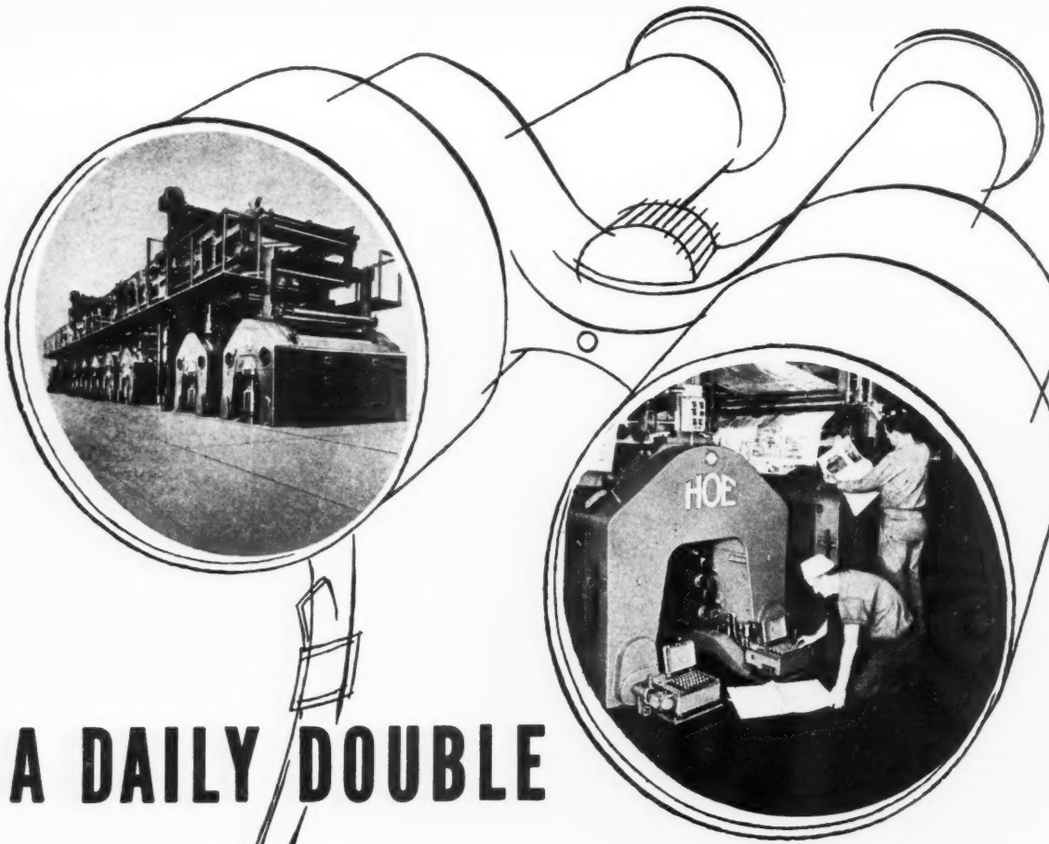
"Fine," you say, "and how much for all that?" Well, here's the point you'll find hard to believe. The new Kelly Three actually costs thousands of dollars LESS, *delivered and installed*, than you would expect, and the hourly operating cost is less, too. And that's the clinching reason why you should lose no time in getting your ATF Representative to give you the proof.

An ATF Associate

American Type Founders

200 ELMORA AVENUE, ELIZABETH B, NEW JERSEY *Branches in Principal Cities*

Manufacturers of Kelly Presses, Little Giant Presses, Chief Offset Presses, Web-fed Offset Presses, Gravure Presses, Foundry Type and Process Cameras. Distributors of Vandercook, Challenge, Chandler & Price, Hamilton and Rosback Equipment for Composing Room, Pressroom and Bindery.



A DAILY DOUBLE

that's never a gamble!

An experienced press crew and a Hoe Color-Convertible Newspaper Press is a combination that ensures the certainty of top quality production day in, day out.

Contributing to the consistently outstanding performance of the Hoe Color-Convertible Press are such factors as extreme simplicity of design . . . precision and convenience of controls . . . one-motion ink control . . . ease of web-threading . . . quick plate lock-up . . . visual micrometer impression adjustment . . . full speed web-splicing . . . and other advantages that make possible its unsurpassed high-quality, high-volume production.

And the best proof that these advantages are thoroughly appreciated, is that new Hoe Color-Convertible Presses, already installed by leading newspapers in North and South America total 288 printing units, with many more on order and under construction.

R. HOE & CO., INC.

910 East 138th Street New York 54, N. Y.
BRANCHES: BOSTON • CHICAGO • SAN FRANCISCO
BIRMINGHAM • PORTLAND, ORE.

Keeping in Touch

International Printing Ink ®

31 Branch Offices in Principal Cities

IPI • DIVISION OF INTERCHEMICAL CORPORATION • 650 ELEVENTH AVE., N. Y. 19 • ADDRESS INQUIRIES DEPT. A

GIANT NEW PRINTING INK PLANT LATEST STEP IN IPI CONSTANT MODERNIZATION PROGRAM

Modern Ink Making Methods Fill 4 Acre Floor Space In New IPI Factory

This giant new IPI printing ink plant in Elizabeth, N. J. is the latest step in IPI's basic policy of constant modernization for greatest efficiency. It closely follows the addition of new IPI ink making and service facilities in Battle Creek, Mich., Chicago, Ill., Philadelphia, Pa., Atlanta, Ga., Memphis, Tenn., Louisville, Ky., and Los Angeles, Cal. Together, these highly efficient units assure all IPI customers of faster and better ink service despite ever growing demands in the Graphic Arts.

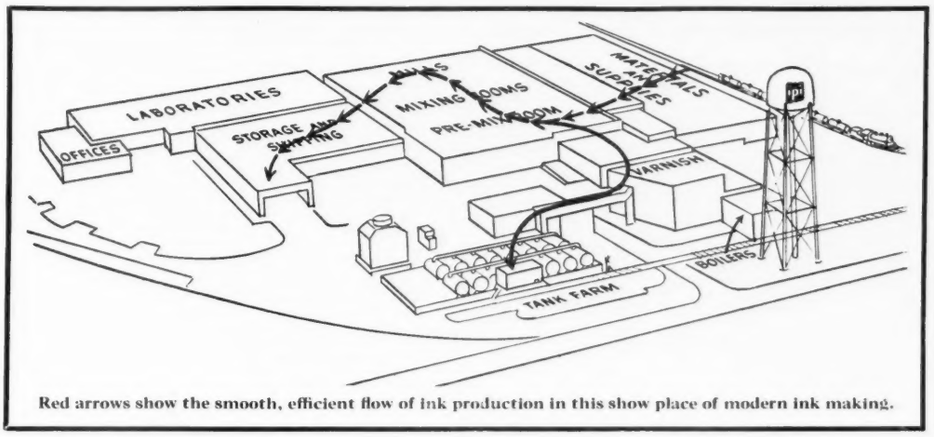
The airplane view above and sketch below show the impressive size and unique layout of the IPI Elizabeth plant. It has more than four acres of floor space—about equal to four football fields—for ink making, research laboratory, storage, shipping and office facilities. The 12½ acre site is ideally located for easy access to railroads and major highways.

IPI planned this factory as the last word in ink making technique. It is the newest and (visitors tell us) the most efficient printing ink plant in the world. It is indeed a "show place" of modern ink making methods. Every worthwhile new development is included.

Single story construction applies throughout the new plant except for the varnish section. Here, huge kettles tower 3 stories high. The one-level plan elsewhere permits a steady, even flow of production. Smoothly operating departments are assured by the unique floor plan. Each step in ink-making dovetails with all others in production.

Overhead tracks, pipelines and power trucks provide fast, low cost material handling—both within and between the many departments. Supplies go direct to mixing and mill rooms from storage or receiving docks.

Complete research facilities are combined with ink making in IPI's new Elizabeth plant. A large technical staff and costly scientific instruments are devoted to improving and expanding IPI ink service.



Red arrows show the smooth, efficient flow of ink production in this show place of modern ink making.

How TIMKEN® bearings help Harris presses make a good impression

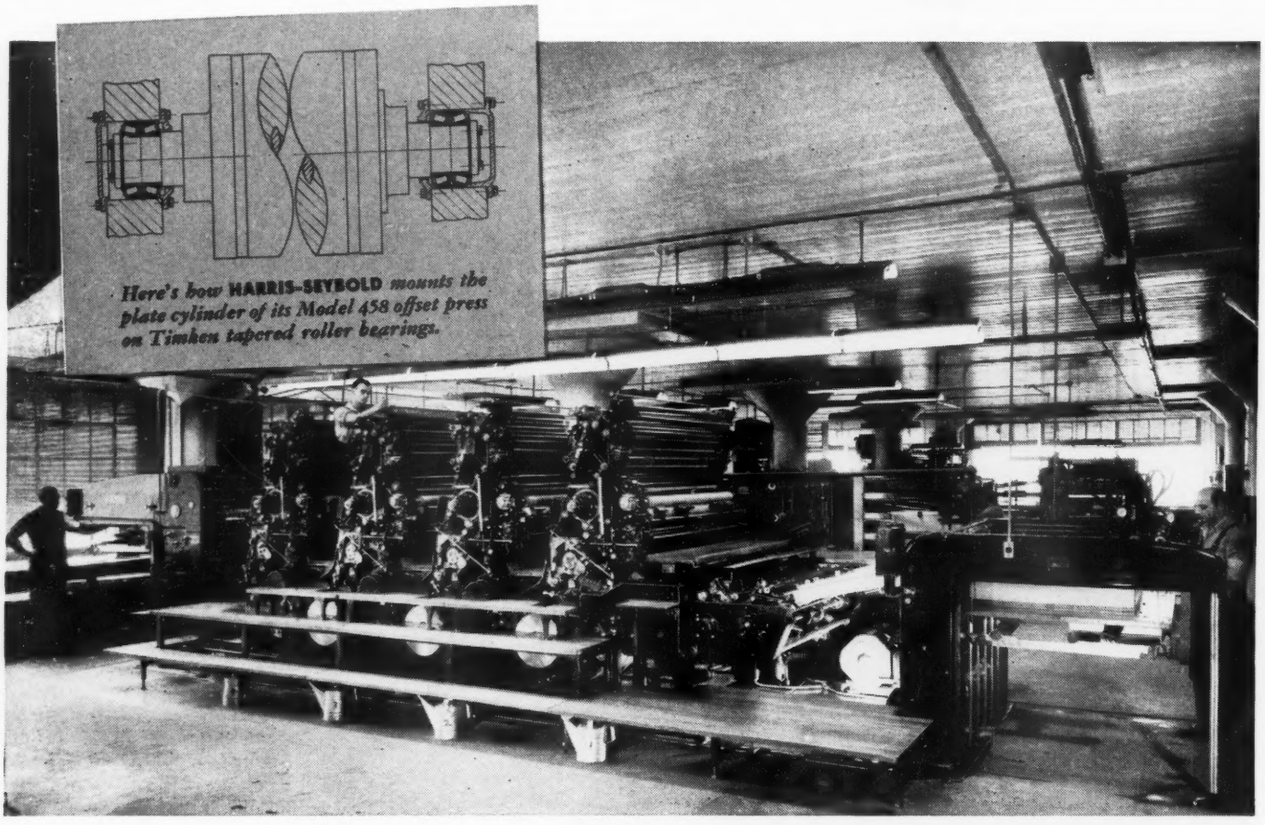
THIS new Harris, Model 458 four-color offset press is now in operation at the Schwabacher-Frey Company, San Francisco. To help insure uniform impression and high quality printing, all plate, impression and transfer cylinders are mounted on Timken® tapered roller bearings. Timken bearings are also used on the main drive shaft, delivery cylinder, advance and feed cylinder and blanket cylinder.

Timken bearings keep cylinders permanently aligned, permitting minute pressure adjustments. They save power and prevent wear. By simplifying lubrication they reduce maintenance costs. And Timken bearings on the cylinder shafts eliminate all speed restrictions due to bearings.

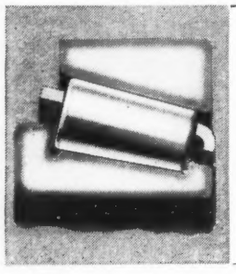
Made from Timken fine alloy steel, Timken bearings normally last the life of the press. Surfaces of rolls and races are precision smooth, helping insure minimum friction. Tapered construction carries both radial and thrust loads in any combination. And the load is spread evenly over a line of contact between rolls and races, providing maximum load capacity.

Remember, no other bearing can give you *all* the advantages you get with Timken bearings. Wherever long-lasting precision is a factor be sure the trade-mark "Timken" is on every bearing you use. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

This symbol on a product means its bearings are the best.



Here's how **HARRIS-SEYBOLD** *mounts the plate cylinder of its Model 458 offset press on Timken tapered roller bearings.*



GREATER LOAD AREA

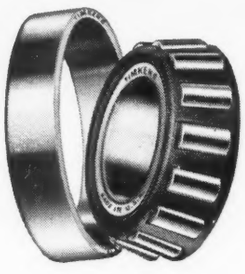
Because the load is carried on the *line* of contact between rollers and races, Timken bearings carry greater loads, hold shafts in line, wear longer.

The Timken Roller Bearing Company is the acknowledged leader in: 1. advanced design; 2. precision manufacturing; 3. rigid quality control; 4. special analysis steels.

TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS



NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▭ BEARING TAKES RADIAL ↕ AND THRUST →← LOADS OR ANY COMBINATION ✳

These papers have recently ordered WOOD Reels, Pasters and Pneumatic Tensions!

8 REELS, PASTERS AND PNEUMATIC TENSIONS (INITIAL ORDER)

7 REELS, PASTERS AND PNEUMATIC TENSIONS (RE-ORDER)

3 REELS, PASTERS AND PNEUMATIC TENSIONS (INITIAL ORDER)

6 REELS, PASTERS AND PNEUMATIC TENSIONS (RE-ORDER)

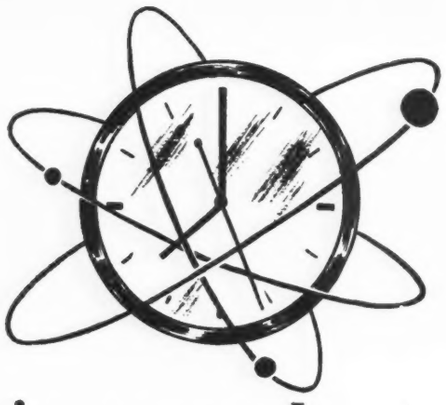
2 REELS, PASTERS AND PNEUMATIC TENSIONS (INITIAL ORDER)

IF IT'S Wood IT'S GOOD

Write for further information

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • SALES OFFICE: 501 FIFTH AVENUE, NEW YORK 17



Building-in Hard-cased Books

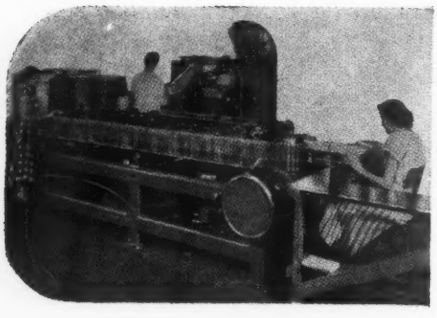
in *seconds* . . . . . instead of *hours!*

The conventional "building-in-on-boards" method of hard binding books requires hours, plant space and investment in boards and their maintenance. Eight to ten hours is a fair estimate of the time books must be kept under compression while paste is setting and hinges are being formed.

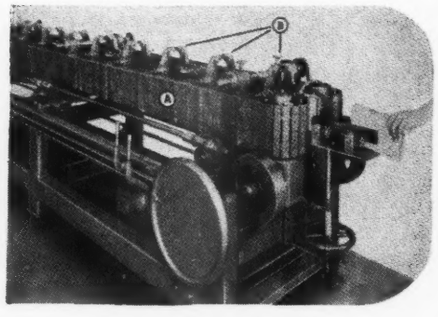
The Dexter-de Florez Building-in Machine delivers finished books, ready for inspection, in a fraction of a minute after they are fed into it.

Operating at a speed of 2,000 books per hour, to pace the standard casing-in machine — it delivers uniformly creased hinges with paste set in the joints. Space now used by building boards is saved; so is the cost of boards and their maintenance. A further saving is that of time now required for stacking and unstacking.

Books may be of any bulk, including case, from 5/16″ to 2-13/16″, 4 to 8″ in width and of any desired length.



Girl at left feeds books fresh from casing-in machine seen in background, to compression belts. Parallel nippers, heated under thermostatic control and adjustable for pressure, "iron" hinges into form as books move along.



. . . and here you see the completed books delivered from the Dexter-de Florez Building-in Machine, ready to be inspected and jacketed.
(a) Compression belts. (b) Heated nippers.

If hard binding is among your operations, consider how this machine, designed by de Florez and built by Dexter Folder Company, could step up your production, increase your plant efficiency and effect important economies.

We will be glad to give you further information.

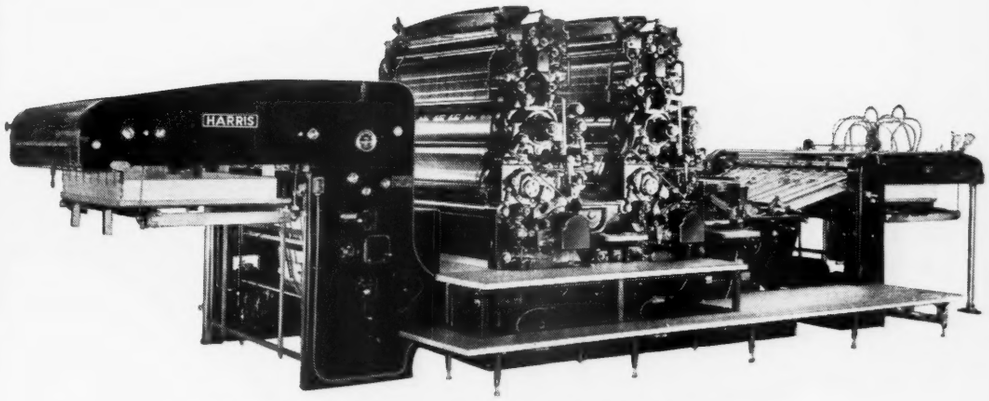
EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-23 1950

Dexter Folder Company

Associated with the de Florez Company for Special Engineering

General Sales Offices • 330 West 42nd Street • New York 18, N. Y.

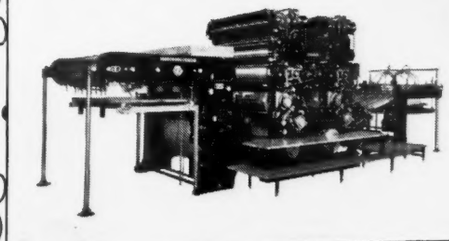
WORK HORSES of the Lithographic Industry



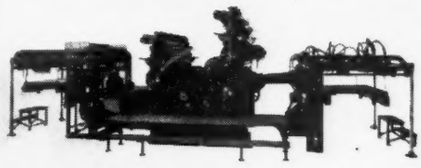
HARRIS MODEL 258, Two-Color 42 x 58" Offset Press

Also Available in Single- and Four-Color Models

Two-Year Old – *on the Inside Track*



Sire-Model LSK



Grandsire-Model GT

Here's a thoroughbred champion from a long line of Harris money-winners.

Its grandsire, the Harris GT, was making records when some of us were still listening to crystal sets.

Its sire, the Harris LSK, still runs a great race.

But as fine as these veterans were in their prime, today's 42 x 58" Harris two-color will outperform them when it comes to quality of register, salable sheets per day, running speed.

Today's race is growing too tough for any but the top performers. It takes the stamina, speed, and superior production of a new Harris to stay out in front.

What chance, for instance, would a Model GT have against a Model 258 when the new press can run 65% faster? It can even outrun the Model LSK by 30%!

Would it improve your operating costs to get *a better run for your money* . . . better by 30%?

HARRIS-SEYBOLD

Dept. G, General Offices, Cleveland 5, Ohio

What does LACK of this press cost you?

ATF-KLINGROSE

Rotogravure Cylinder

PROOF PRESS *provides quick, accurate proofs before chroming cylinders: a big money saver!*

It costs real money to tie up a production press, perhaps for days, proofing etched rotogravure cylinders. It costs still more, if corrections are needed, for packing and shipping back and forth from engraver to printer.

The ATF-Klingrose Rotogravure Cylinder Proof Press makes it possible to eliminate these losses and hazards. Proofs are quickly taken directly from the cylinders. Corrections can be made *before* the cylinders are chromed. Successive colors are laid over each other exactly as in the finished job, to show fidelity of reproduction, accuracy of register and uniformity of etch. At every step the ATF-Klingrose Cylinder Proof Press makes money by saving you money and time.

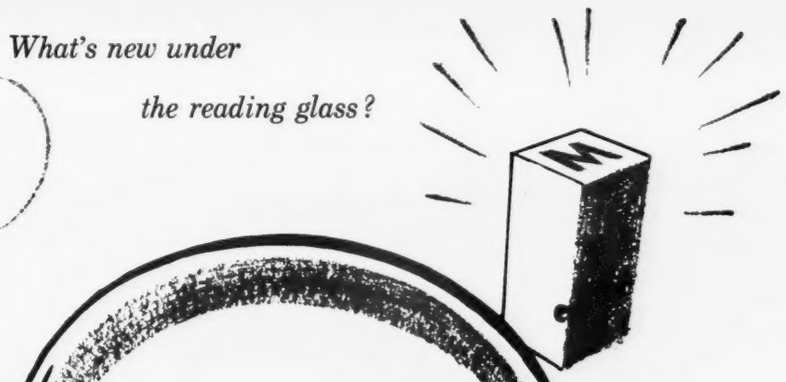
Precision-built, providing hair-line adjustments, compactly constructed, ATF-Klingrose Rotogravure Cylinder Proof Presses are available in standard sizes for practically all cylinder widths and circumferences. *For complete information, address*

American Type Founders

KLINGROSE GRAVURE DIVISION
200 Elmora Avenue, Elizabeth B, New Jersey

What's new under

the reading glass?



every character in Monotype is new!

The perpetual *newness* of Monotype material ensures the beauty of the printed page. Every setting is made with new-cast type . . . never is Monotype redistributed for subsequent use. Monotype characters are never battered, worn or chipped. They are deep-cut, sharp in outline, true in "height-to-paper."

Because of the ease and speed of settings by Monotype, the once used form is always dumped into the melting pot. There is no distribution at any time. Every type is new—used but once and then melted. And every character is perfect, cast separately on an individual matrix. It is apparent that type characters, originally designed as individual units, can be reproduced with maximum fidelity only when cast by machine in the identical way. Under the reading glass or under the eye of the discriminating who look for perfection in the printed word, type by Monotype is always new.

Lanston Monotype Machine Company,
Twenty-fourth and Locust Streets, Philadelphia 3, Pa.

THERE IS ONLY ONE **monotype**

BRANCH OFFICES: 116 Spring St., N.W., Atlanta 3, Ga. • 170 Summer St., Boston 10, Mass. • 216 W. Jackson Blvd., Chicago 6, Ill. • 441 Lexington Ave., New York 17, N. Y. • 55 New Montgomery St., San Francisco 5, Cal.
IN CANADA: Monotype Company of Canada, Ltd., 34 Adelaide St., West Toronto, Toronto 1, Ont., Canada

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-23 1950

chemco

FILMS CARBON TISSUE CAMERAS DARKROOM EQUIPMENT

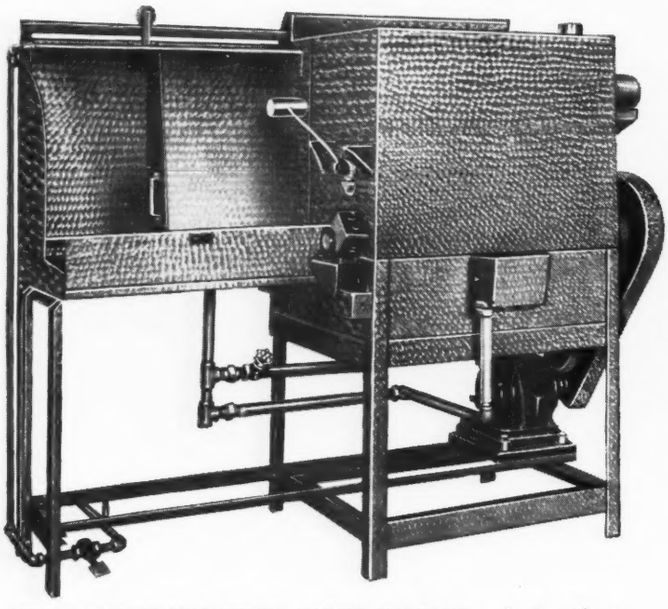
STRIPPING EQUIPMENT SENSITIZING EQUIPMENT PRINTING EQUIPMENT

DEVELOPING EQUIPMENT ETCHING EQUIPMENT CHEMICALS

TOOLS AND SUPPLIES

PHOTO-MECHANICAL EQUIPMENT AND SUPPLIES

CHEMCO LEVER CONTROL ETCHING MACHINE



CHEMCO LEVER CONTROL ETCHING MACHINE MODEL 501 — Another Chemco machine designed to bring every advantage to the Etching Department, long life . . . fume-free operation . . . faster etching . . . maximum convenience for operators. Filling is accomplished through a compartment in the front, which also serves as a bath level indicator.

LOOK AT ITS CONSTRUCTION: Inside and out, every metal part is heavy Chromium-Nickel (Stainless) Steel . . . even the fan! The body of the machine is formed of large sheets, resulting in few joints . . . and all of these are welded. Advantages? *Extra* long life . . . complete *proofing* against nitric acid . . . and easy heat dissipation means lower bath temperatures and *far less acid evaporation.*

LOOK AT ITS CONVENIENCE: Sliding plate holder . . . lever controlled acid spray baffle. Baffle drops over paddle wheels when lever is advanced so that plates may be inserted or removed with paddle wheel in full operation. A multiple blade paddle wheel drives the acid spray with sufficient force to clean the plate so that a minimum of brushing is required. These Chemco advantages mean *faster etching with less fatigue and less nuisances to operators.*

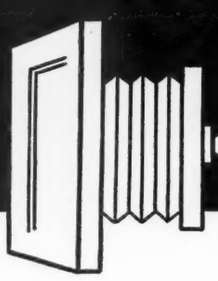
To keep the shop free from annoying and unhealthy acid fumes, a built-in high speed ventilating fan is provided, driven by a separate motor.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23 · 1950

CHEMCO PHOTOPRODUCTS COMPANY, INC.

chemco
PHOTOPRODUCTS COMPANY INC
GLEN COVE N Y

FACTORY AND GENERAL OFFICES GLEN COVE, NEW YORK



BRANCHES:
New York, Chicago, Detroit,
New Orleans, Boston, Atlanta, Dallas

PE-4

CHEMCO PHOTOPRODUCTS CO., INC.
GLEN COVE, N. Y.

Gentlemen: I am interested in learning more about your following products:

_____
_____
_____

Name _____
Firm Name _____
Address _____
City _____ *State* _____

Compare!

For Cleaner Impressions with Less Wear....

it's

TINGUE
TRADE MARK
PRINTING PRESS
BLANKETS

OUTER OR UPPER BLANKETS

COMBINO

An extremely durable clean printing laminated blanket.

"TINGUE" COATED FELT

The same durable coating as "COMBINO" affixed to a repressed felt blanket. For those who prefer a softer packing. Wool Felt also available uncoated in gauges .063 and .083.

UNDER BLANKETS

CUSHION CORK*

Highly resilient and recommended as the underpacking for "COMBINO" or in combination with "FOUNDATION" Blanket or "TINGU-CORK" where a drawsheet is used.

TINGUCORK*

Much firmer than "CUSHION CORK" and preferred where precision plates are available as a companion blanket for "CUSHION CORK", "FOUNDATION" or "COMBINO."

FOUNDATION

A firm durable oilproof under packing laminated with "Neoprene" for use in combination with "CUSHION CORK", "TINGUCORK", and "TINGUE" Drawsheets or Felt.

KORKER*

Loses .006 to .008 during first 50,000 impressions and then holds at a constant level for the life of the blanket. Desirable for plants with older type presses, or, where an unfavorable mechanical condition exists.

*Reg. U. S. Pat. Office

DRAWSHEETS

GOLD TYMPAN

An old favorite for Flat Bed Presses. Skivered metallic surface accepts excess ink and flakes it off without smudging.

IMPROVED SATISFACTION

Coated with "Calvaprene" by DuPont, on a fabric which has been impregnated with "Neoprene."

TOP

This drawsheet is firm, durable, economical and of long life.

STERLING

The post-war plastic coated Drawsheet. Extremely durable.

TINGUE BROWN AND COMPANY

114-120 EAST 23rd STREET, NEW YORK 10, N Y
1227 WABASH AVENUE, CHICAGO 5, ILLINOIS
723 E WASHINGTON BLVD, LOS ANGELES 21, CAL
507 BISHOP STREET, N W, ATLANTA, GEORGIA

CANADIAN SALES AGENTS
ROSS WHITEHEAD & CO., LTD.
MONTREAL, CANADA

melt metal and save up to 40% on fuel!

Kemp Pots are designed especially for newspaper work. This 44" Round Stereo Pot pictured here casts 50 plates an hour with one Pony Autoplate!

How immersion heating, developed by KEMP, assures low fuel costs and faster heating for both large and small melting units.

Get on the bandwagon! Giant newspapers in Chicago, Philadelphia and New York as well as a score or more smaller dailies and weeklies *depend on Kemp* Immersion Heating to get high-quality melting at rock bottom prices! Just recently, one paper reported that their Kemp unit saved *50% to 60% on fuel*—cash savings that paid for the entire Kemp installation *in one year!*

POSITIVE HEAT CONTROL

Replace conventional melting equipment with modern, efficient Kemp Immersion Pots and *save money.* There's no brickwork to steal heat . . . no external combustion chamber . . . no carbon monoxide . . . no temperature overrun. You get *high melting rates,* reduced dross formation, speed of temperature recovery after adding cold material . . . PLUS an estimated fuel saving of up to 40% and more!

SEND FOR DETAILS

The famous Kemp Carburetor, part of each installation, assures complete combustion with no waste. One-pipe air and fuel feed reduces installation costs, simplifies maintenance. Get the facts. Find out how much you can save. Fill out and mail coupon for Bulletin IE-10 today!

KEMP OF BALTIMORE — **IMMERSION MELTING POTS**

CARBURETORS
BURNERS
FIRE CHECKS
ATMOSPHERE & INERT GAS GENERATORS
ADSORPTIVE DRYERS
METAL MELTING UNITS
SINGEING EQUIPMENT
SPECIAL EQUIPMENT

THE C. M. KEMP MFG. CO., Dept. L-4
405 E. Oliver St., Baltimore 2, Md.

Gentlemen: Please send me Information Bulletin IE-11.

Name .....
Company .....
Address .....
City ..... Zone ..... State .....

BOOKS
RECEIVED

The Story of Magnesium

MANY printing executives like to keep informed with respect to the various metals used in the Graphic Arts industry. While the majority of them are not metallurgists, yet it is sound practice to know something about the sources, properties and fabrication of the materials used by them.

The Story of Magnesium, by W. H. Gross, who is a member of the Technical Service Dept., of The Dow Chemical Co., has been written from the standpoint of the layman rather than the technical specialist. It is a readable story, just as is indicated by the title of the book. Prior to the war, magnesium was a by-product of the chemical industry, 7 T. per day being used. During World War II plants were erected capable of producing 300,000 T. per year. Much of the metal was extracted from sea water, which is an inexhaustible source.

There isn't much text in the book devoted exclusively to uses of magnesium in the Graphic Arts industry, no doubt because the consumption of the fabricated metal (with alloys) for photoengraving, backing plates, and basing purposes is minute at the moment. However, it is stated that the printing industry offers a large and varied field for the use of magnesium. Light weight, good machinability and desirable chemical characteristics each contribute to the usefulness of the metal in the Graphic Arts. Mention is made of the desirability of magnesium for photoengraving. Magnesium, because of its light weight, was chosen for many moving parts in a book folding machine. The machine operates at 4000 sheets per hr., and it is essential that vibration be at a minimum to insure smooth operation.

The chapters deal with history, production, alloying, melting and refining, casting, fabrication, machining, joining, surface finishing, physical metallurgy and uses.

The Story of Magnesium—By W. H. Gross. Size 5 1/8 in. by 7 3/4 in.; 260 pages; 97 illustrations; hard bound in pebbled maroon cloth with jacket; gold stamped cover. Price, $2 per copy. Published by American Society for Metals, 7301 Euclid Ave., Cleveland 3, O. Order direct from ASFM, at foregoing address.

Controlled Humidity Method

AN AIR conditioning method by which moisture is absorbed from air directly by a hygienic liquid absorbent is described for plant engineers in *Niagara Controlled Humidity Method.* Included in the 52 page manual published by the Niagara Blower Co., are detailed

(*Continued on Page 64*)

TO EFFICIENT...

ECONOMICAL NEWSPAPER PRINTING...

EASTERN!

More than ever before... busy newspapers throughout the country depend on EASTERN for printing equipment and supplies. Over the years, they have come to rely on EASTERN for tested, high quality items... for superior service and consistent economy!

Your pressroom, composing room, stereotype and engraving departments too, can all benefit if **you** try EASTERN.

Place your order with EASTERN now!

- **PLATE-TAK—The SUPER-THIN Cut Mounting Tape**
- **FLECTO—Gummed Backing Felt (Individually packed 5 sheets per bundle)**
- **TRU-MOLD Cork Molding Blanket**
- **EASTERN ROUTER BELTS In All Sizes**
- **EASTERN CIRCULAR SAWS**
- **ROYLE ROUTING CUTTERS**
- **CURVED AND FLAT CASTING BOARD**
- **MATRIX SCORCHER—MATRIX TRIMMING KNIVES**
- **DIRECT PRESSURE MOLDING MATERIALS**

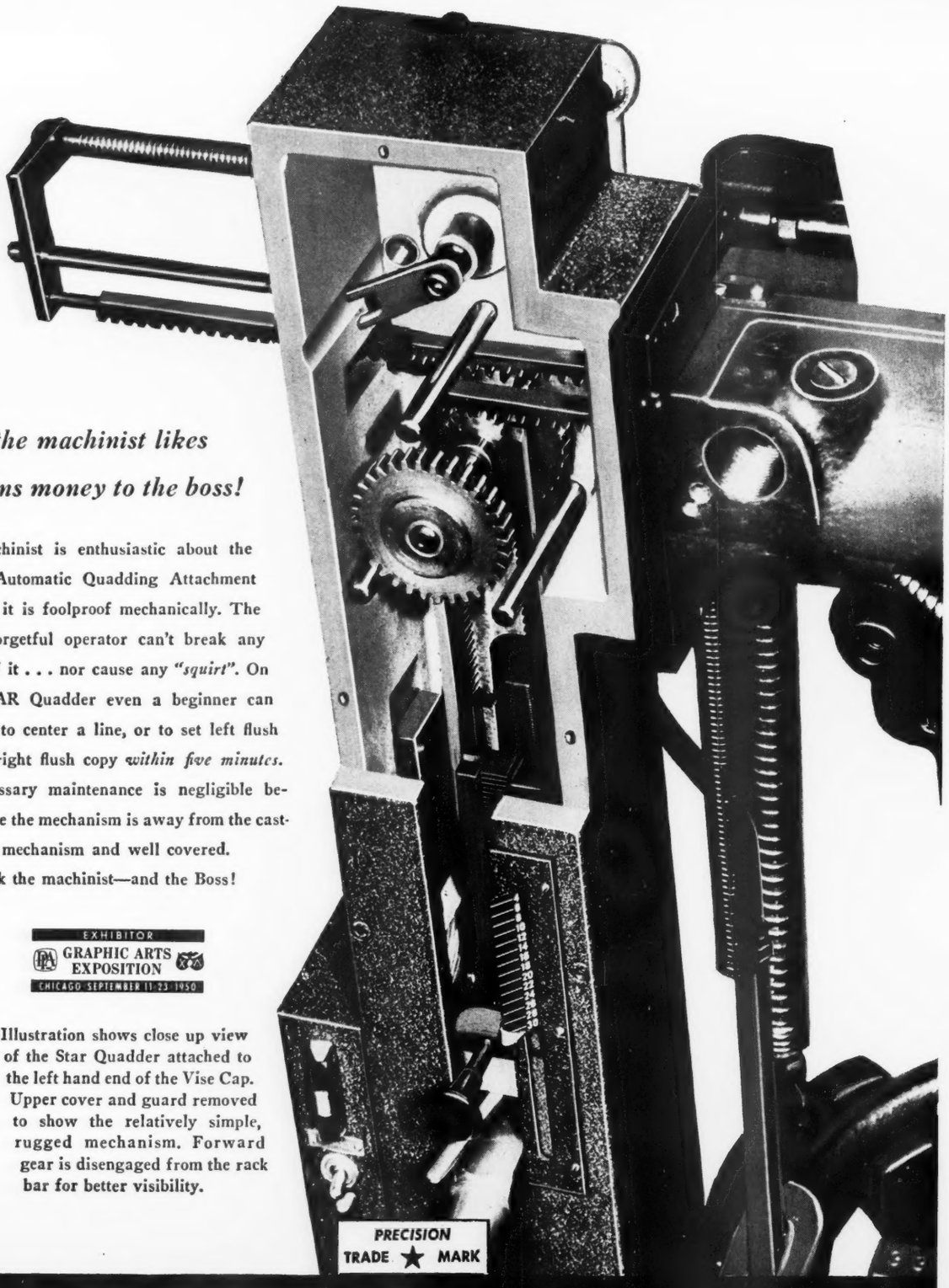
Our new catalog lists hundreds of other items certain to better your production . . . write for your copy today!

Representatives for:

STA-HI CORPORATION—Master Former, Premier Shaver, Power Form Lift, Vacuum Casting Box, MasteRouter.
AMERICAN STEEL CHASE CO.—Newspaper Chases, Make-up Trucks
H. B. ROUSE COMPANY—Accessories and Equipment.
CHALLENGE MACHINERY COMPANY—Composing Room Equipment.

EASTERN FOR ECONOMY

EASTERN NEWSPAPER SUPPLY, INC.
9603 Northern Boulevard, Corona, L. I., New York



What the machinist likes ... means money to the boss!

The machinist is enthusiastic about the STAR Automatic Quadding Attachment because it is foolproof mechanically. The most forgetful operator can't break any part of it . . . nor cause any *"squirt"*. On a STAR Quadder even a beginner can learn to center a line, or to set left flush and right flush copy *within five minutes.* Necessary maintenance is negligible because the mechanism is away from the casting mechanism and well covered. Ask the machinist—and the Boss!

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-23 1950

Illustration shows close up view of the Star Quadder attached to the left hand end of the Vise Cap. Upper cover and guard removed to show the relatively simple, rugged mechanism. Forward gear is disengaged from the rack bar for better visibility.

PRECISION TRADE ★ MARK

LINOTYPE PARTS COMPANY

INCORPORATED

Factory and Main Office
SOUTH HACKENSACK, N. J.

Branch Office:
1327 BROADWAY, KANSAS CITY 6, MO.

CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON

They mean a lot when you buy equipment

DESIGN

MANUFACTURE

SALES

SERVICE

LAKE ERIE
ENGINEERING CORP.
BUFFALO, N.Y. U.S.A.

ONE ORGANIZATION

ABILITY

meaning the ability of the manufacturer to design and build equipment that is *efficient and dependable.*

LAKE ERIE is one of the world's largest manufacturers of... and a recognized leader in the development of... hydraulic machinery.

LAKE ERIE has had over fifteen continuous years of specialized experience in the development of hydraulic plate-making equipment.

RESPONSIBILITY

meaning the manufacturer's responsibility for his equipment *after it is sold.*

LAKE ERIE equipment is designed, manufactured and serviced by one organization ...whether it is sold direct or through an authorized agent. *There is no division of responsibility...* and never any question about it.

The first hydraulic plate-making equipment ever made by Lake Erie is still operating... and Lake Erie is *still prepared to service it after fifteen years.*

You can depend on the Ability and Responsibility of the Lake Erie Organization

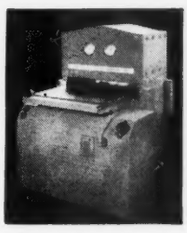
LAKE ERIE
ENGINEERING CORP.
BUFFALO, N.Y. U.S.A.

LAKE ERIE®

LAKE ERIE ENGINEERING CORP.
568 Woodward Avenue, Buffalo 17, New York
Offices in Principal Cities and Foreign Countries

★

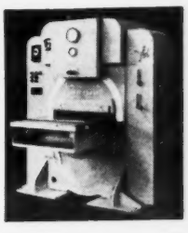
● Leading manufacturer of hydraulic presses—all sizes and types—stereotype molding... plastics molding... laminating...die sinking...metal working...forging...metal extrusion...waste wood and plywood...rubber vulcanizing... special purpose.



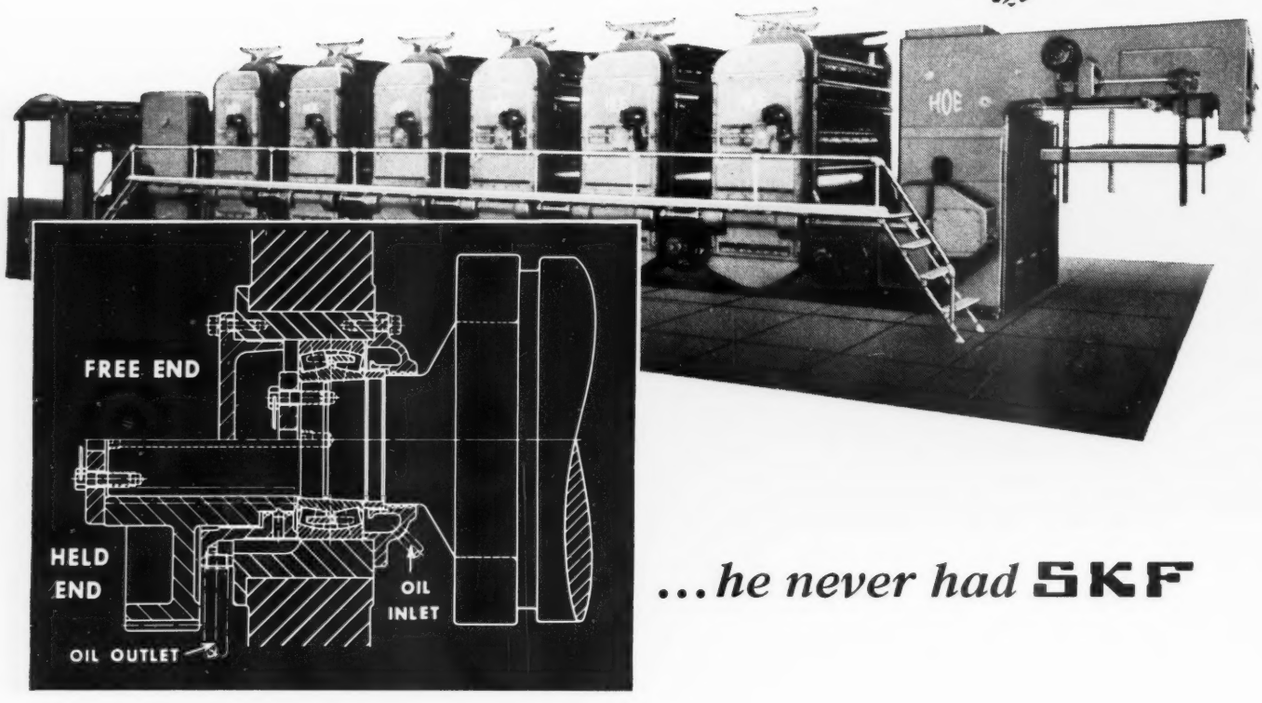
ACRAPLATE for Rubber and Plastic Printing Plates
...for Direct Pressure Matrix Molding **DIRECTOMAT**

More than 600 Acraplates and Directomats are now in service...far more than all other makes of equipment combined. And there are far more models of Acraplate and Directomat to select from when you buy...to assure that you get the most efficient machine possible for your specific purpose.

● **WRITE** for descriptive literature or recommendations. No obligation.

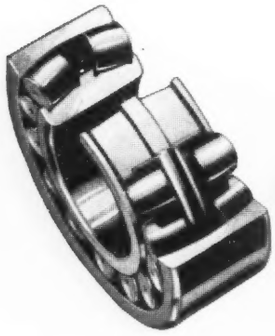


Gutenberg never had it so good



...he never had SKF

Built by R. Hoe & Co., Inc., for The Grinnell Lithographic Company, the world's first six-color sheet-feed offset press is now busy handling 50″ x 72″ sheets, operating at speeds up to 6000 sheets an hour. That's championship size . . . and it's championship speed . . . speed difficult to obtain and impossible to hold without anti-friction bearings. SKF Self-Aligning Printing Cylinder Bearings are integral parts of this mammoth press . . . they can be a part of *all* types of printing presses. They were specified here because the SKF Self-Aligning Cylinder Bearing has a large bore and relatively small outside diameter; uniform preload is built in; precision tolerances applied; inherent thrust capacity ends need for an additional bearing to take gear thrust or stabilize the cylinder; cool operation is always assured. Regardless of the type of press you design or build . . . you'll find it pays to consult an SKF Engineer. **SKF** Industries, Inc., Philadelphia 32, Pa., *the Pioneers of the Deep Groove Ball Bearing—Spherical Roller Bearing—Self-Aligning Ball Bearing.* 7096



SKF

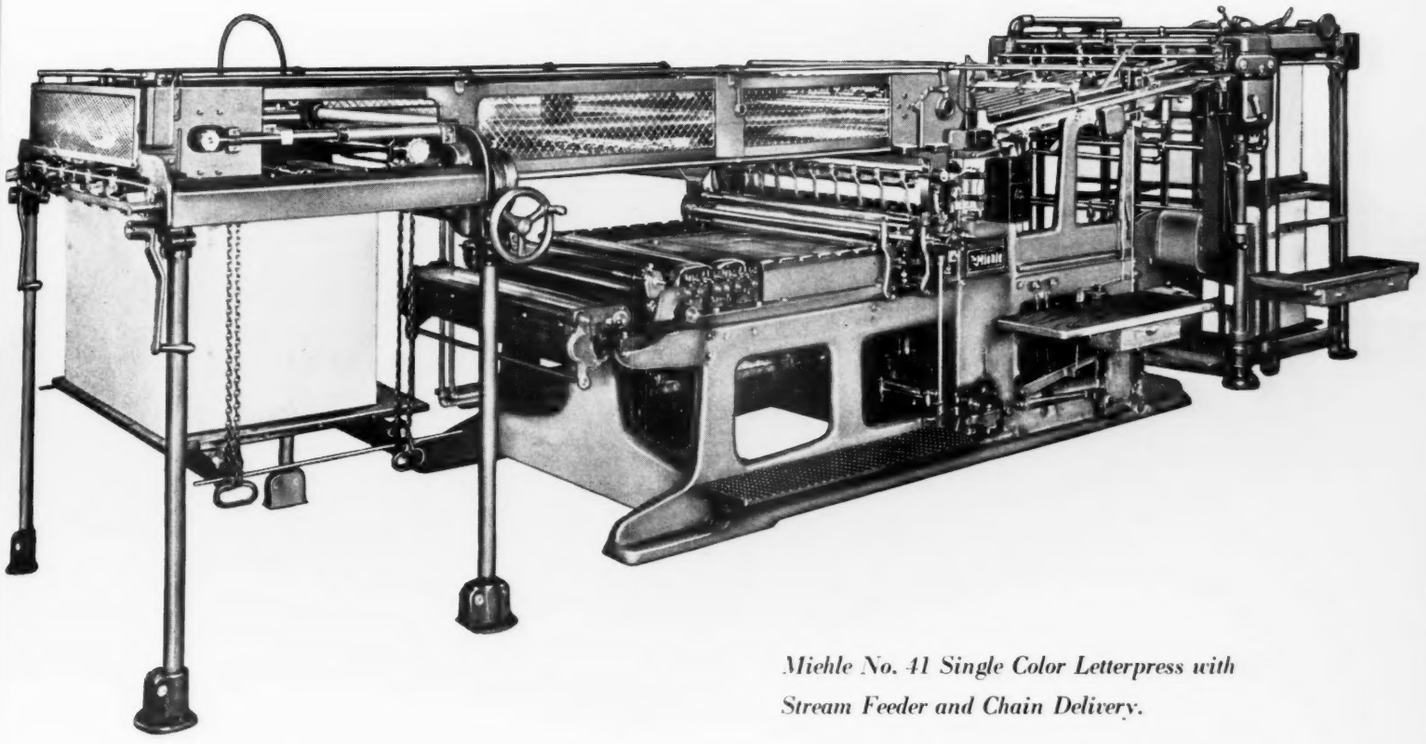
BALL AND ROLLER BEARINGS

8 REASONS WHY SKF IS PREFERRED BY ALL INDUSTRY

INTEGRITY · CRAFTSMANSHIP · METALLURGY · TOLERANCE CONTROL

SURFACE FINISH · PRODUCT UNIFORMITY · ENGINEERING SERVICE · FIELD SERVICE

speak louder than words



Miehle No. 41 Single Color Letterpress with Stream Feeder and Chain Delivery.

Leading Printers Like These Are Ordering and Re-ordering

The firms listed here are among those which operate *four or more* of the new Miehle 41's and 46's, both Single Color and Two Color—presses which enable them to compete profitably in today's market because of higher production, greater dependability, and the capacity to handle a wider range of work. For proof, ask to see actual sample sheets which demonstrate the greatly increased production of up-to-date Miehle Presses.

Beck Engraving Co., Inc., Philadelphia, Pa.
Country Life Press, Garden City, L. I.
Evans-Winter-Hebb, Detroit, Mich.
Guide-Kalkhoff-Burr, Inc., New York City, N.Y.
W. F. Hall Printing Co., Chicago, Ill.
Lind Brothers, New York City, N.Y.
The Maqua Company, Schenectady, N.Y.
Poole Bros., Inc., Chicago, Ill.
Edward Stern & Co., Philadelphia, Pa.
Sutherland Paper Co., Kalamazoo, Mich.
West Publishing Co., St. Paul, Minn.

MIEHLE PRINTING PRESS & MANUFACTURING COMPANY
World's Largest Builder of Sheet Fed Presses
CHICAGO 8, ILLINOIS

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 12-17

$1,000,000 Press Job at N. Y. News

The *New York News* recently placed orders for eight new black press units and two pairs of folders which, together with related equipment and its installation, will cost approximately $1,000,000, Business Manager P. B. Stephens announced.

Contracts for the new equipment were negotiated with the Goss Printing Press Co. by Administrative Assistant Ralph Neale.

Delivery of the new equipment is scheduled to start in July. It is expected that four of the units will be in operation by early fall and the balance ready for service by December.

The equipment will replace seven press units and one pair of folders which have been in use since the Manhattan Plant went into operation Feb. 22, 1930. Consequently, the equipment change will represent a gain of one press unit and an additional pair of folders.

Up to 128 Pages

The extra unit and folder, together with the added advantage of all of the new equipment, will make it possible to print for the first time in the Manhattan Plant a 128-page Main Section for the Sunday News. The present capacity is 112 pages.

Press arrangements in the Brooklyn Plant have for some time permitted the printing of 128-page papers.

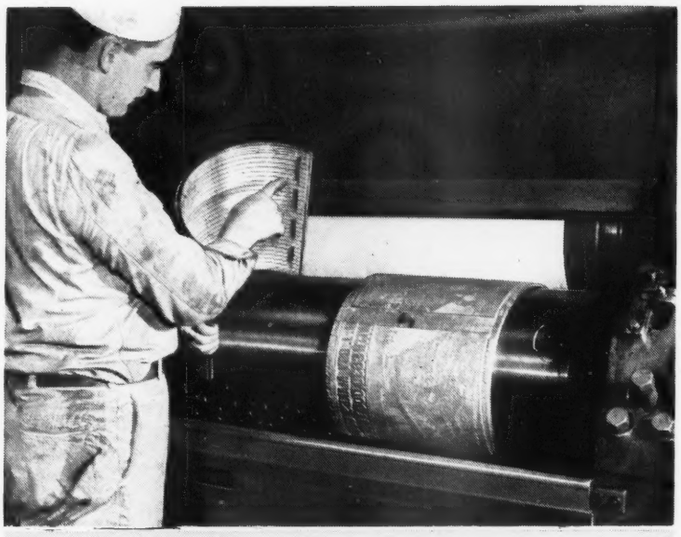
Although the new equipment will be basically identical to the eight-unit Goss "Headliner" Press which the News installed in the Manhattan Plant early in 1948, it will incorporate 18 minor changes recommended by the News mechanical staff.

The changes, which pressmen and machinists found desirable during the year and a half they have been operating and maintaining the Goss Headliner, were explained in detail to engineers by Press Room Superintendent Bill O'Brien and Chief Machinist Charles Everitt during recent visits to the Goss plant in Chicago. The engineers accepted the recommendations and made the changes in the press specifications.

A particular feature which has proved successful on the Goss units which the News has been using is the "tension plate lock-up." This is a system whereby page plates are secured to the press cylinders by a locking device which engages the underside of the plates.

With tension plate lock-up, the amount of press blanket replacement is cut considerably. Savings on the cost of replacing blankets average nearly $1,000 per unit per year, News executives said.

When the installation of the new equipment is completed, the News will have a total of 101 black press units and 19 pairs of folders.



NEW YORK NEWS SAVES ABOUT $1000 PER UNIT PER YEAR WITH GOSS TENSION PLATE LOCK-UP

The New York News with the largest circulation in the U.S.A., puts a tremendous production load on their presses. Normally, blankets are replaced every six weeks. Now . . . with Tension Plate Lock-up on their new Goss Headliner Press, they are getting at least a year's wear from a set of blankets, saving approximately ***$1,000 per unit per year.***

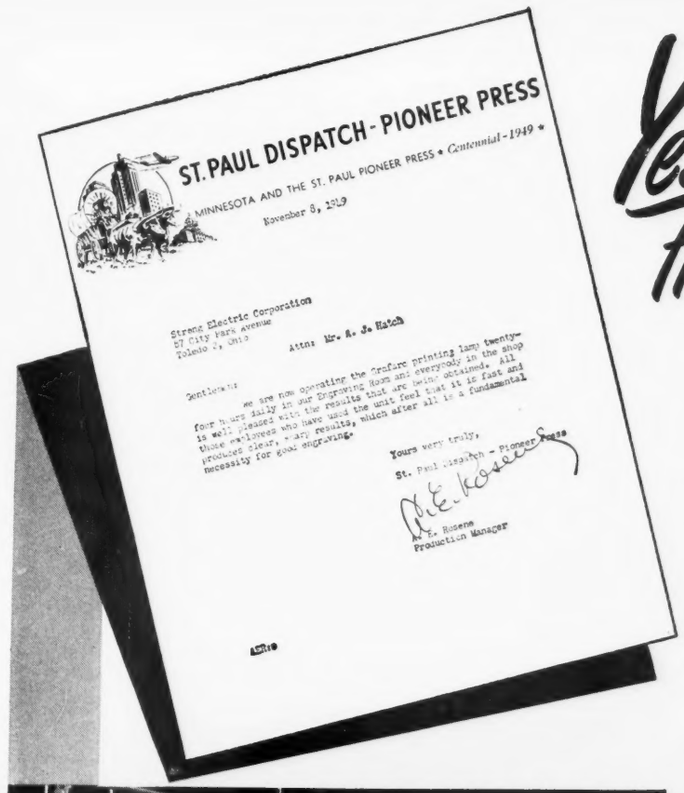
Economy is not the only advantage of Goss Tension Plate Lock-up. It makes the press *more quiet*—plate slipping and plate noise are eliminated. It promotes *safety*—the plate holds securely around the cylinder—does not "fatigue" or crack. It improves *printing quality*—for example, open pages with large white areas do not "blacken up."

Comparable savings and results have been reported by leading newspapers from coast to coast. Pressmen, foremen, superintendents, and top management are enthusiastic in their approval of Tension Plate Lock-up. It will be well worth your while to investigate the record of this *patented and proven* Goss feature. Write now!

THE GOSS PRINTING PRESS COMPANY
1535 S. Paulina St., Chicago 8, Ill.
Duplex Division: Battle Creek, Mich.
Goss Printing Press Co., Ltd., Preston, England

it's **GOSS** *again*

Reprinted from
EDITOR & PUBLISHER
February 11, 1950


ST. PAUL DISPATCH - PIONEER PRESS

MINNESOTA AND THE ST. PAUL PIONEER PRESS • *Centennial - 1949* •

November 8, 1949

Strong Electric Corporation
57 City Park Avenue
Toledo 2, Ohio

Attn: Mr. A. J. Hatch

Gentlemen:

We are now operating the Grafarc printing lamp twenty-four hours daily in our Engraving Room and everybody in the shop is well pleased with the results that are being obtained. All those employees who have used the unit feel that it is fast and produces clear, sharp results, which after all is a fundamental necessity for good engraving.

Yours very truly,
St. Paul Dispatch - Pioneer Press

A. E. Rosene
Production Manager

Yes everybody likes the results obtained

WITH THE

STRONG GRAFARC

FULLY AUTOMATIC HIGH INTENSITY ARC LAMPS

More even distribution of light. Precise control of intensity. Extreme steadiness of light volume. Exposure time cut in half. Sharper prints. Better quality work. Effect important savings.

★ ★ ★

A No. 32221 Strong Grafarc Horizontal Frame Printing Lamp installed at the St. Paul Dispatch-Pioneer Press. A 45 degree angle mirror projects the light downward. This arrangement eliminates the conventional installation of the arc lamp on horizontal printing frame with the arc pointed downward. No carbon ash can fall on the printing frame glass. Arc smoke cannot smoke up the reflector.

FREE Trial Offer---

Take advantage of a free trial without obligation. Because of the Grafarc's low intensity requirement, the present line supply wiring to your equipment is usually adequate.

USE COUPON FOR CONVENIENCE IN REQUESTING FREE TRIAL OR OBTAINING DETAILS

THE STRONG ELECTRIC CORPORATION
307 City Park Avenue **Toledo 2, Ohio**

☐ I wish to take advantage of your free trial offer on Grafarc Lamps, without obligation.

☐ Please send free literature and prices on Grafarc Lamps.

Name_____

Firm_____

Street_____

City_____ State_____

Four darn good reasons

WHY YOU SHOULD INSTALL MATRIX SERVICE

Read 'em and Reap

1.

Publishers and printers now realize more than ever the added value of Matrix Contrast Service due to their greatly increased operating costs. The reduction of approximately one-third of all errors in linecasting machine operation means valuable minutes saved . . . and a yearly dollar saving far in excess of the moderate yearly charge for Matrix Contrast Service.

2.

With Matrix Contrast Service, typesetting machine errors stand out like a sore thumb . . . before the line is cast. Sharp, clear-cut Black & White reference marks have a visibility equivalent to 9 point type as compared to 3½ point for used untreated matrices. Matrix Contrast Service, therefore, reduces eye-fatigue, conserves energy and promotes increased production.

3.

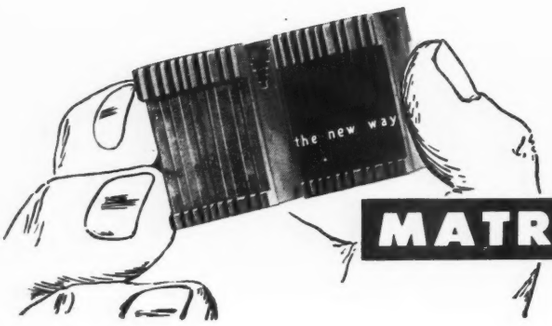
Just as with Black and White Contrast, colors such as red, green, yellow and orange can be applied to old as well as new matrices . . . against the same jet black background. Matrix Contrast Colors aid operators in the detection of "wrong fonts" and insure the posirive selection of matrices from "pi" stackers or trays.

4.

There's a Matrix Contrast Service Branch near you! With six service branches located in Boston, New York, Chicago, St. Louis, San Francisco and Los Angeles, we can process your matrices in Black and White and Colors now, and give immediate attention to processing all sorts and new matrices you purchase in the future.

There are many other reasons, too. Write today for latest facts on *savings for you* through use of Matrix Contrast Service . . . no obligation, of course. MATRIX CONTRAST CORPORATION, 154 West 14th St., New York 11, N. Y. — 326 W. Madison Street, Chicago 6, Ill. — 1105 Trenton Street, Los Angeles 15, Calif. — Sole licensees of the Percy L. Hill Matrix Contrast Patent No. 1,796,023, other patent pending. European Agents: Funditor, Ltd., 3 Woodbridge Street, Clerkenwell Green, London, E. C. 1.

Copyright 1950, Matrix Contrast Corporation



MATRIX CONTRAST SERVICE

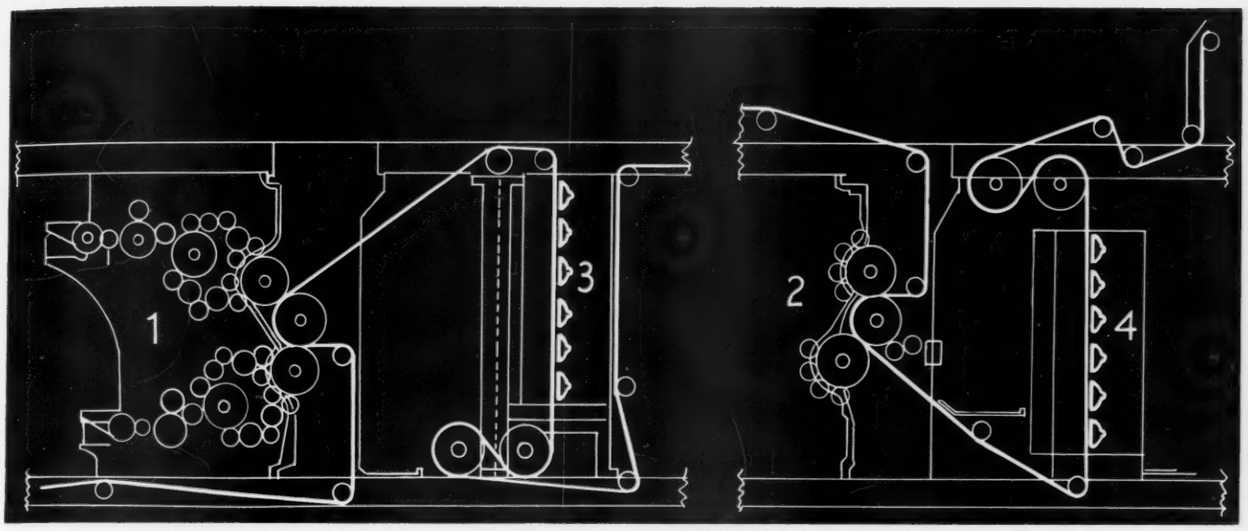


Fig. 1.—This side elevation diagram is representative of a rotary two-and-two magazine letterpress equipped with Doyle Infrared Driers for drying the ink on both sides of the paper web. As the paper web bearing the printed images leaves the first impression unit *1*, it is passed before the first bank of Infrared Driers *3* so that by the time the web passes through the second impression unit for printing the opposite side of the web, the ink will be dry to prevent first impression offset. After the paper web has been printed upon in the second impression press unit *2*, on the opposite side of the web, the web is passed before the second bank of infrared driers *4*. Thus when the web passes into the folder, offset smear or smut from the printed image on either side of the web is eliminated. Charles C. Doyle of The J. E. Doyle Co., states the heating assemblies *3* and *4*, can be placed in vertical, horizontal or angular position in a press according to printing unit and frame limitations.

Rotary Press Infrared Ink Driers

MECHANISM and operating apparatus have been developed for automatic control of infrared ink drying equipment on rotary printing presses by Charles C. Doyle of The J. E. Doyle Co., Cleveland.

While the Doyle infrared equipment is used in many applications in the printing industry, this article is confined to operation of the equipment as applied to rotary printing presses. It is being used for drying oil, aniline and other types of ink on paper, cellophane, glassine, parchment, cloth and textiles. Among the applications, infrared driers are used in the printing of sausage skins, coarse potato bags and plastic playing cards.

On a rotary printing press, the infrared drier equipment is so arranged that the ink on each side of the web is dried by passing the web before the drying units as it leaves each printing unit. Thus, the ink on the paper web, printed in one or more colors by first impression is dried immediately after leaving the first impression unit. Then after receiving the printed impression on the second or opposite side of the web, the web passes before it enters the folder or is rewound, or before entering a fabricating unit at the delivery end of the press. In this way, first impression offset, and first and second impression smear, offset or smut from the inks is eliminated.

When presses equipped with Doyle infrared ink drying equipment are started, means are provided (1) For automatically energizing the coil elements in the heater assemblies; (2) For automatically rotating the pivoted coil heater elements through an arc of 180 deg. or any part of 360 deg. from non-operating position to operating position close to and on either or both sides of the moving paper web. Conversely, when the press is stopped, (1) The coil elements are automatically deenergized so they do not consume any electrical current during their inactive period, and (2) In order to avoid burning or scorching the stationary paper web, the element assemblies are automatically rotated through an arc of 180 deg. (or any fractional part of 360 deg. as desired). When in non-operating position, the residual heat in the coil elements is thus prevented from scorching the paper web.

The heating element assemblies consist of coils mounted end to end in rows

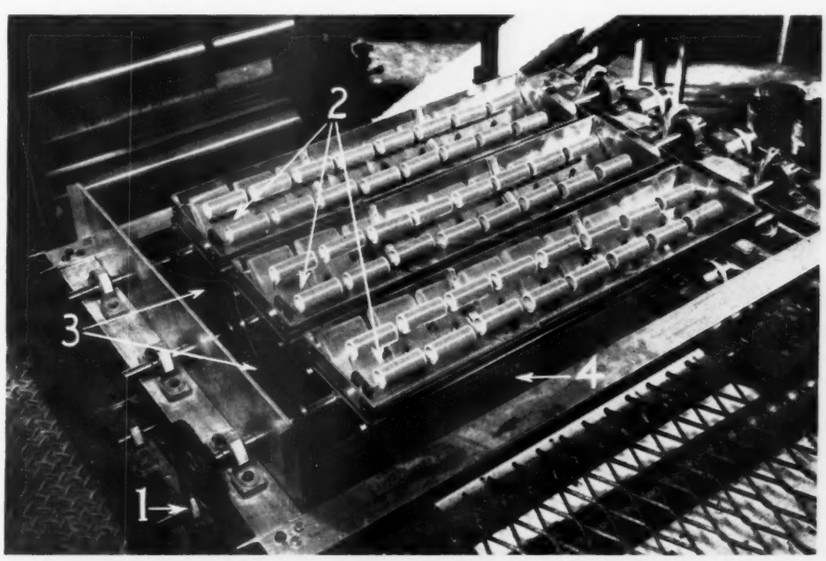


Fig. 2.—Closeup view of Doyle Automatic Ink Drier System applied to an eight color offset perfecting web press. In this view, one bank of heater coils is mounted above the paper web, and the other is mounted below the web.

The heater coils in the top frame have been turned upwardly from the paper web. The press has been stopped. When the motor drive stop button was depressed to stop the press, the infrared heater assemblies on both sides of the web were automatically rotated so the hot coils face away from the paper web as shown. This prevents residual heat in the coils from scorching or burning the web. The heater assemblies are rotated through an arc of 180 deg. by a gear reduction motor tied in with the press drive. The gear reduction motor drive chain is indicated at *1*. The three heater assemblies *2*, are mounted on individual ball bearings and are driven in unison by sprocket wheel and chain connection *3*.

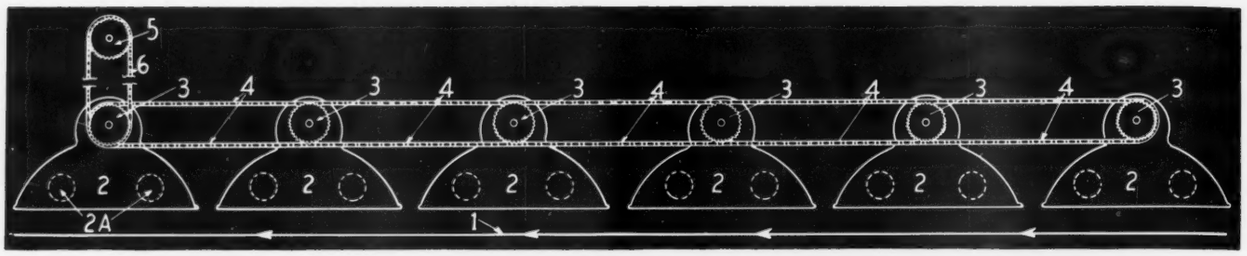


Fig. 3.—This diagram (not to scale) shows end view of six unit Doyle Infrared Ink Drier assembly opposite the moving paper web *1* on a rotary letterpress. The six reflector units are indicated at *2* and the open glow coils at *2A*. The reflector units *2* are mounted in fixed position in relation to the paper web *1*, except that being mounted in bearings, the bell-shaped reflectors may be rotated automatically when the press is started or stopped.

It is apparent that if the press is stopped without turning the open side of the reflectors away from the web, residual heat in the coils will scorch or burn the web itself. The means for turning the reflectors automatically from On to Off or from Off to On position is explained as follows: A small gear reduction motor and sprocket wheel are indicated at *5*. The motor may be mounted in a convenient location. When the press operator depresses a button to stop the press, the gear reduction motor *5* is energized. A sprocket chain *6* connects the gear reduction motor *5* with the sprocket *3* on the shaft of the left-hand heater assembly. The other heater assemblies are linked to each other by sprockets *7* and chains *4* in such manner that when the gear reduction motor actuates sprocket *3* all reflectors are rotated through a sector of a circle to direct the heat from the coils away from the paper web. Each reflector is individually linked by staggered drives to the next. (See Fig. 2).

within the insulated reflector and frame supporting the assembly. Each coil unit is approx. 3½ in. long by 1¼ in. to 1½ in. diam. The nickel alloy wire is wound upon a refractory core. These replaceable coils permit assembling a sufficient number in two rows within a reflector or shield to cover the maximum width of paper web within the capacity of the press. The open glow coils, when energized, radiate heat waves principally from the coil and partially by reflected energy. The insulated reflector is of highly polished metal.

The surface temperature of a coil under normal energization is 1230 deg. F. When positioned 2 in. from the paper web, the radiated temperature at the web is 800 deg. F. It should be understood, however, that the ink drying power of a row of coils across the web varies with the speed of web travel. For instance, we will assume that one coil assembly containing two rows of coils with the coils extending across and at a distance of 2 in. from the web will dry the ink on MF book paper (with normal paper temperature and moisture content) while the web is moving at a printing speed of 300 f.p.m. If the printing speed of the web is increased, the drying power of the coils will be "diluted." For example, if the web speed is increased to 600 f.p.m., the coil assembly would need to be doubled. If the web speed were to be increased to 900 f.p.m., the coil assembly would need to be tripled. It should be understood that the surface finish of the paper, the moisture content of the paper itself and the temperature of the paper affect the ink drying effectiveness of the coil assemblies. Mr. Doyle explained that usually the coil assemblies are installed so that 25% more coil drying capacity than is normally needed for average work is available. Thus additional ink drying capacity can be provided by cutting more coils into the circuit by means of manually operated switches. If these extra coils are not needed they remain inactive.

The coil or element assembly supporting frames themselves are fixed in stationary position within the press structure. The coil assemblies are mounted pivot-wise in ball bearings and extend across the width of the paper web. The coil elements, when in non-operating position, being mounted in insulated reflector troughs, shield the paper web from the residual heat in the deenergized coils. This principle is explained in the captions for Figs. *3* and *4*.

When the pressman depresses the *start* or *stop* buttons to set the press in motion, or to stop the press from running speed, a relay switch connected to the main drive motor immediately turns off the heat in the drier coils; another relay starts a small gear reduction motor so the open-glow coils will be turned away from the paper web; when the coil assemblies have been turned to the angle for which they have been deflected (usually 180 deg.) a limit switch shuts off the small motor which rotates the coil assemblies; when the gear reduction motor is stopped by the limit switch, another relay actuates a magnetic brake to hold the coil assemblies in deflected position. The above mentioned movements are reversed automatically when the press operating button is again depressed.

In addition to connecting the coil elements in multiple or in series in order to obtain proper operating heat radiation, the electrical circuit may be arranged to cut in gradually the number of coils used in each assembly according to the press control drive apparatus. If the press is operated at half speed, the coils will operate at half heat. As the press control cuts in for higher speeds groups of the infrared heater coils, too, will cut in and be energized accordingly.

Means have also been provided to cut out one-fourth, one-half or three-quarters of the width of the heater assemblies so as to radiate infrared energy only upon the width of paper web being run through the press.

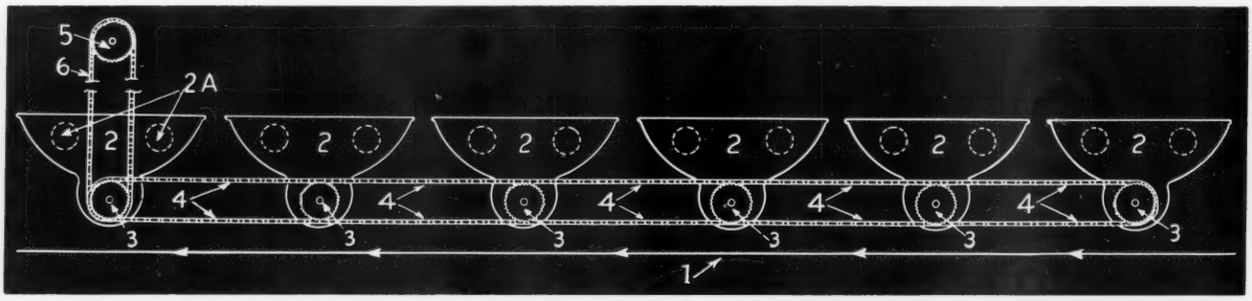


Fig. 4.—This diagram is representative of the same Doyle Infrared Drier mechanism in Fig. 3. When the operator presses the press motor drive stop button, the gear reduction motor *5* is energized. Through chain connection *6*, the sprocket *3* is caused to rotate. In turn, through the chain connections *4*, sprockets *7* are also caused to rotate, thus turning the reflectors *2* upwardly and away from the paper web *1*. At this time the supply of electricity to the coils themselves is automatically cut off. When the pressman pushes the press motor drive button to start the press, the reflectors are automatically returned to the operating position shown in Fig. 3. Simultaneously, the coils *2A* are automatically reenergized to supply ink drying power.

Foundation of the R & E Council

(An Editorial)

WITH respect to the organization of the Research and Engineering Council of the Graphic Arts, comments have been voiced regarding its objectives. Apparently, some executives don't understand the organization's objectives nor that they are compatible. Research, engineering, coordination, correlation, and work simplification, *plus plant supervision*, are strictly within the province of a group like this.

In a group consisting of representatives of the heterogenous processes utilized in the Graphic Arts industries, there is every reason why the Research and Engineering Council will succeed. At the moment, the membership expresses the very essence of cooperation and broadminded attitude which should mark the thinking of representatives of manufacturer and printing companies.

A prominent executive friend of ours said he'd like to have seen the organization named Cooperative Society for the Reduction in the Cost of Printing. His principal observation is he fears the members of a conglomerate group like this are full of ancient trade jealousies and suspicions. Try as they do to eliminate this old-fashioned thinking, it seems they cannot help occasionally reverting to type. He qualified the statement, however, by saying that as the meetings are held they get better. He also sincerely hopes that before too long they can get down to talking engineering and research rather than to clutter up their thinking as to whether or not some development may not help a competitor as well as themselves.

He also observed: "The Graphic Arts industry must realize that changes in methods must develop all along the line which will permit printing to be done at a cheaper price. Competition among the different types of businesses can still go on and will be conducted on the relative merits of the processes, the service that can be given, and so on." Undoubtedly, this is just what will happen once the R&E Council gets fully organized.

Pure research, developmental work, management and plant supervision are inseparably related. What we are trying to say is that as the Council's activities are crystallized there will be close-knit cooperation by and among research, manufacturer and plant supervision groups.

We want to call your attention to the dual objectives embodied in the name: Research and Engineering Council of the Graphic Arts Industry. When we think in terms of research let's think of groups like LTF, ANPA Research, Printing Plates Research, Inc., Photo-Engravers Research, Inc., NPIRI, Gravure Research, Inc., IPC Research, and a number of other groups as well as manufacturing companies conducting research. Actually and immediately, research as such may or may not pay off in the end. Its activities cost money. It is not immediately concerned with printing plant production or scientific management. It is concerned with developing new materials and processes and the refining of existing processes. It will permit production of printing of as good or better quality at a reasonable consumer price.

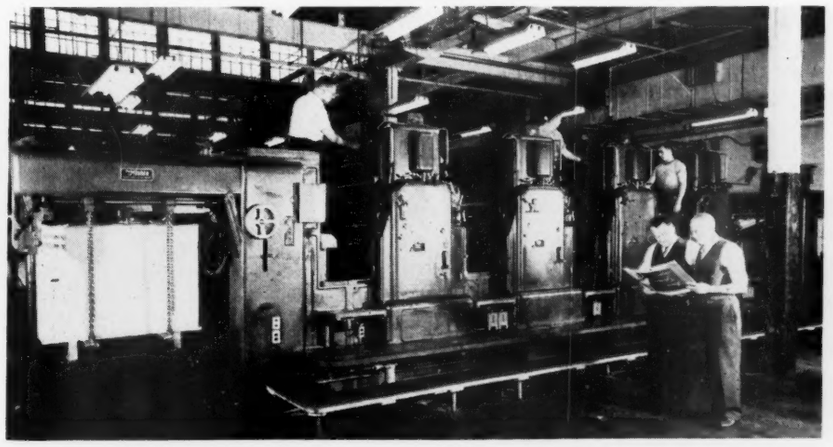
As has been stipulated in its prospectus, it is not the purpose of the Council itself to engage in actual research, but as the result of the work of the various sections (or committees) it can assist in directing the researchers' efforts.

While we shouldn't seek to divide the activities of the purely research groups from the activities of the engineering group when discussing the Council's activities, yet for the purpose of this explanation we have somewhat superficially defined research and now come to the engineering activities of the Research and Engineering Council. The latter activities will consist of developing modern manufacturing methods, work simplification, and acting in an advisory capacity to the Council as a whole.

Joseph Chanko, General Manager of the Conde Nast plant, made some remarks at the recent platemaking meeting in Columbus which are particularly appropriate with respect to the utility of one of the committees, but in principle is really the very foundation of the engineering activities of the Council itself.

In speaking about electrotyping problems, he suggested formation of a committee to consist of 10 electrotypers, 10 photoengravers and 10 printers. In principle, we like the idea because: (1) Electrotypers will know about the improvements which should be made in their product through the reliable advice which will be furnished both by the printer and the photoengraver. (2) In turn, the electrotyper can tell the engraver and the printer whether or not it is feasible to comply with their suggestions. (3) Again, in turn, the electrotyper will be in a position to indicate to the engraver and printer what they can do to help him make better electrotypes. Thus, the electrotyper will be guided in his research and/or developmental work and will know just how to attempt to apply it. After all, the supreme test of the fitness of the electrotype is its performance right in the pressroom. The electrotyper, the engraver and the printer are working toward one objective only—the reproduction of a printed image on paper.

We can think of many other ways in which the divergent groups can cooperate with each other, such as the paper and ink people working together, and so on. The ultimate objective of the R&E Council is a common one with respect to its membership. The men now composing the membership realize the benefits to be derived from industry-wide cooperation. In closing, we want to state that when the true perspective is understood by everyone, and the good which can be accomplished for the industry is appreciated, the effect will be to help the Graphic Arts industry prosper immeasurably.



Miehle Installation — Miehle Printing Press & Mfg. Co. has announced the installation of a Miehle No. 76, four-color offset press, (pictured above) at Forbes Lithograph Mfg. Co. in Chelsea, Mass. Also installed at the Forbes plant was a Miehle No. 76, two-color offset press. Both presses will handle sheets 52 in. by 76 in.

Newspapers Honored

Winners in the eleventh annual typography contest sponsored by the Northwestern University chapter of Sigma Delta Chi, national journalistic fraternity, for member newspapers of the Inland Daily Press Association, were announced recently. Top awards went to the Carroll (Ia.) *Daily Times Herald*, Waukesha (Wis.) *Daily Freeman*, Rochester (Minn.) *Post-Bulletin*, Appleton (Wis.) *Post-Crescent* and the Chicago (Ill.) *Daily News*. The Appleton *Post-Crescent* was honored for the third consecutive year and became permanent owner of the trophy in its class. The panel of judges consisted of E. Z. Dimitman, newspaper consultant, Chicago; Morton Goldsholl, president of the Society of Typographic Art, Chicago; and Dr. Albert A. Sutton, chairman of the department of graphic arts, Medill School of Journalism, Northwestern University.

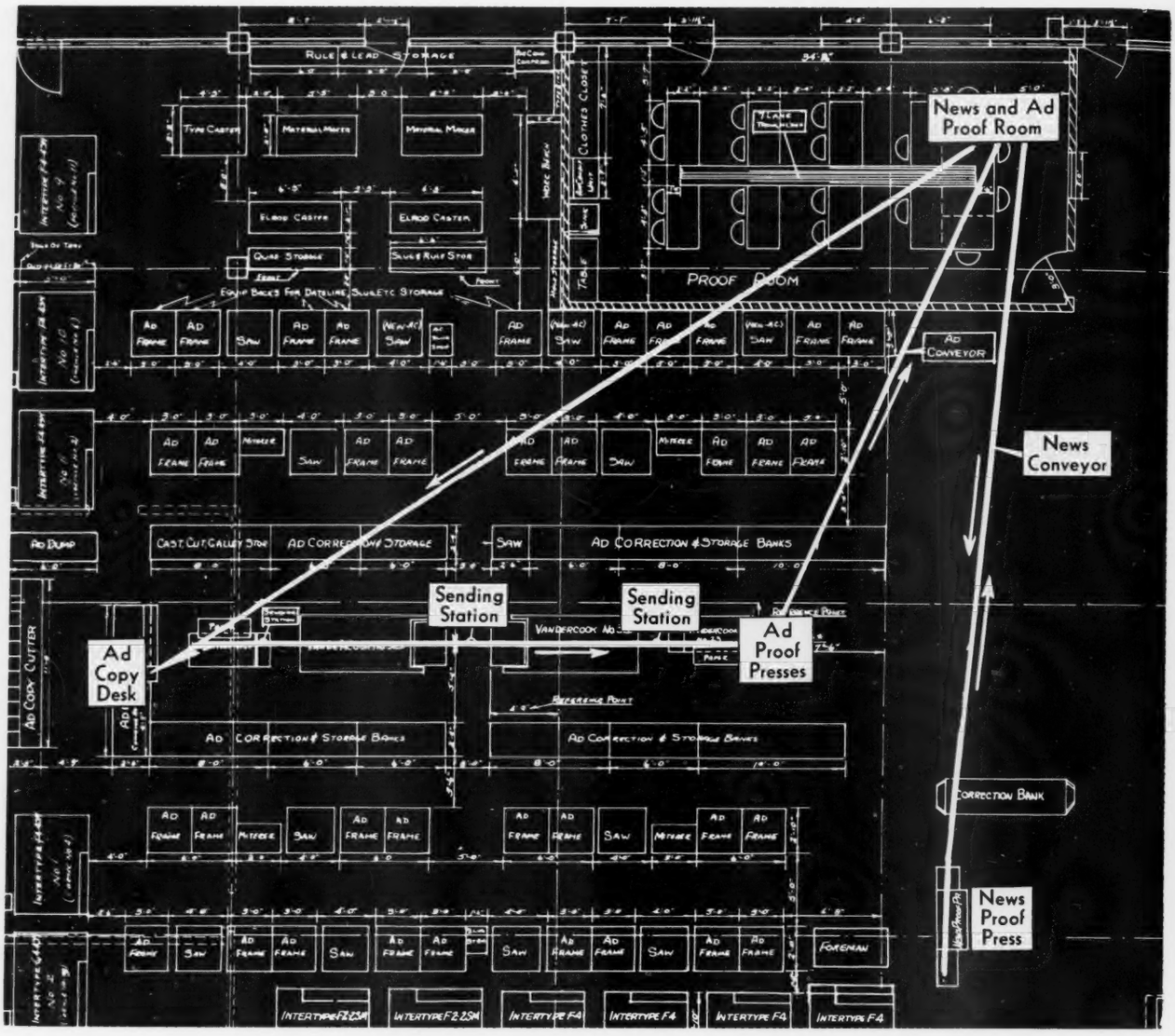


Fig. 2.

Conveyor System and Proof Room in Newspaper Composing Room

By JULIAN J. EBERLE*

**Mechanical Engineer*, The Milwaukee Journal.

Fig. 1.

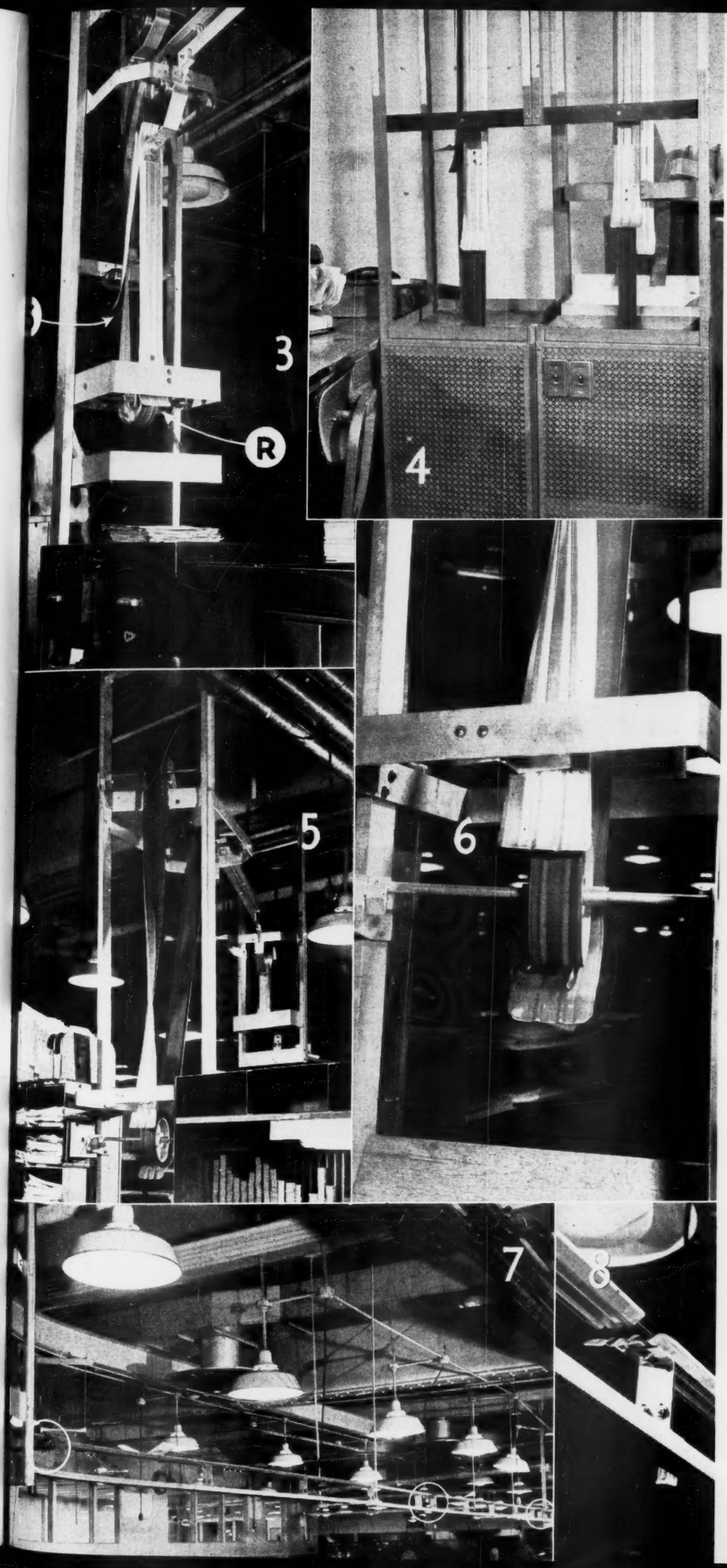
WITHIN the last year the Composing Room of The Milwaukee *Journal* was the scene of major equipment rearrangements. The ad alley was entirely rearranged with some new equipment added. The news and ad proof rooms were combined into an entirely new room. As a result of these changes, less walking is required to produce a finished ad.

Ad and News Copy and Proof Conveyors

A part of the saving in legwork can be attributed to the installation of the drag type copy and proof conveyors. The *Christian Science Monitor* was the first and probably only other newspaper to install a conveyor of this type which was originally designed and patented by Western Union engineers for handling telegraph messages. The Novak Co., Plainfield, N. J., was licensed to sell, manufacture and install these conveyors. Novak found extensive use in stock and bond houses for handling light messages over considerable distances at high speed.

The *Milwaukee Journal* installation was built by The Novak Co., and represents a change in application to the extent that the product handled varies considerably in size—from a single sheet to a full page ad complete with copy and layouts folded to quarter-page size.

The conveyor is simple in design, consisting of a light weight rubber impregnated canvas belt, 2 in. wide, running on a slider plate of heavy gauge formed sheet metal. Three rubber friction strips are vulcanized to the operating face of the belt. In Fig. 1 is illustrated the principle of operation. Copy and proofs are inserted between the slider plate and the belt at a sending station where an open-



Figs. 3, 4, 5, 6, 7 and 8

ing is provided by bending the slider plate away from the belt as illustrated in Fig. 3, 4, and 8. The friction strips on the belts prevent slippage between belt and copy and cause the copy to slide along the stationary metal slider plate with no damage to the material handled. The weight of the belt exerts the only pressure on the material handled on the horizontal runs.

Two drag type conveyors were installed, as indicated on the Composing Room floor plan, Fig. 2.

The news conveyor was a simple installation consisting of two receiving and sending stations—one at the news proof press and the other in the proof room. The horizontal runs are suspended from the ceiling on 5 ft. centers. In Fig. 3 is shown the sending and receiving station and its relation to the proof press. Type galleys to be proofed are placed on the cabinet between the press and conveyor. Copy is folded in the proof and sent by inserting between the slider plate and belt at a point indicated by arrow S in Fig. 3. In the case of classified copy where the number of sheets involved makes it difficult to fold the copy in the proof, a manila envelope is used to contain this material before inserting in conveyor. Marked proofs from the proof room are discharged from the conveyor as the belt leaves the slider plate at arrow R, and deposited in the metal tray shown.

Proof Room Terminal

The proof room ends of the ad and news conveyors are shown in Fig. 4. The news copy and proofs are received in the box at the back of the news station (right). Marked proofs are returned by inserting in the sending station located in the front.

The proof room end of the ad conveyor is shown to the left of the news conveyor in Fig. 4. The receiving station is at the front and the corrected proofs and copy are returned from the station shown partially at the left where the slider plate is bent outwards to form the station.

Motor Drives

The ½ h.p. drive motor for each conveyor is housed in the bottom section of each proof room conveyor station. The news conveyor travels 900 ft. per min. and the ad conveyor, due to the bulk of the material handled, travels about 600 ft. per min.

The corrected proofs and copy are returned to the ad copy desk as shown in the center of Fig. 5. In Fig. 6 is shown a closeup of this station with the receiving station at the top center and the sending station at the bottom of the pulley. After leaving the ad copy desk the conveyor goes to the ceiling and then drops (as shown left in Fig. 7) to 6 ft. 4 in. above the floor to run horizontally over the line of proof presses. Three sending stations are provided above the presses in this run to facilitate sending of proofs and copy.

Figs. 9, 10 and 11.

These are circled in Fig. 7. The proof room can be seen in the background. The extensive use of windows above eye level in the proof room wall should be noted.

Fig. 8 is a closeup of one of the sending stations above the proof presses.

The Proof Room

THE news and ad proof rooms are combined into a single room 16 ft. 10 in. by 34 ft. 2 in. To reduce the feeling of confinement, windows fill the entire west wall from 6 ft. 6 in. above the floor to the ceiling as can be seen in Fig. 7. Similar treatment was given the south wall from counter height up.

The walls were insulated to prevent the transmission of Composing Room noises through the walls. All exposed ceiling surfaces are covered with Celotex to reduce noise reflection within the room proper. The Celo-tex is suspended at the lower edge of the light troffers.

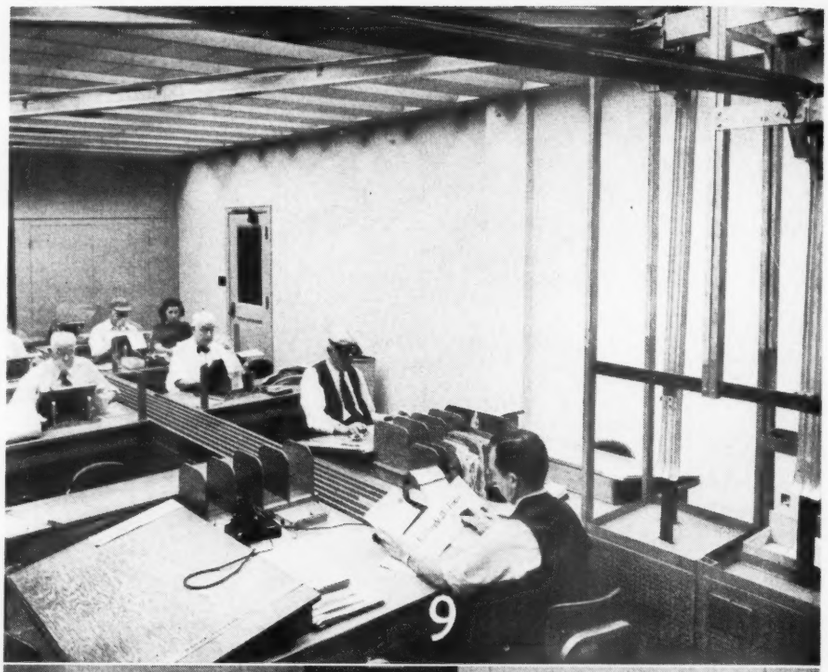
Lighting, provided by troffers installed on 25 in. centers across the narrow dimension of the room, can be seen as light strips across the ceiling in Fig. 9. Each troffer strip contains three 5 ft. 40 w. low brightness fluorescent tubes. A uniform light of 125 foot candles is obtained on all tables without shadows and without uncomfortable brightness from the tubes themselves. The 5 ft. lengths and oversize diameter of the 40 w. low brightness tubes considerably reduces surface brightness of the tube. The depth of the troffers prevents seeing the tubes in the normal line of vision.

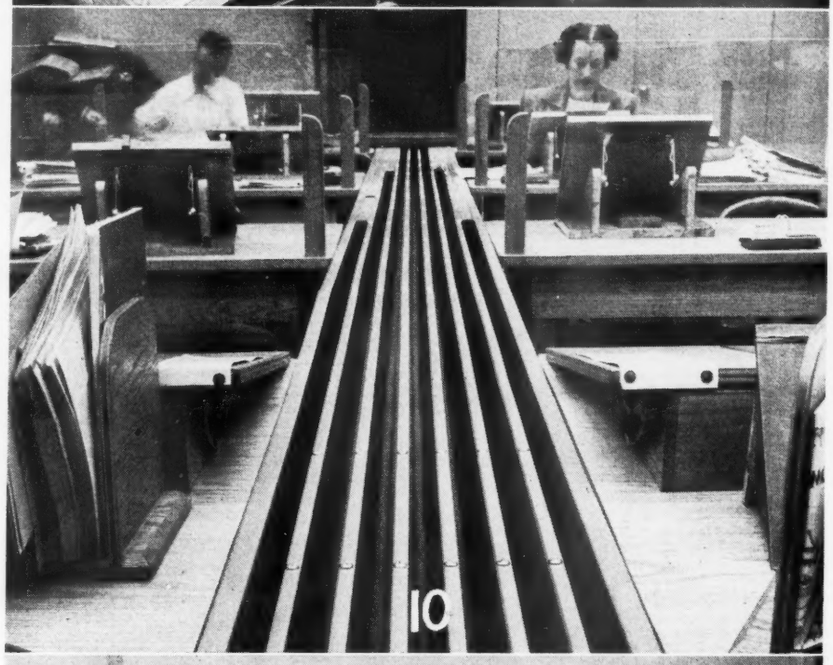
The room is air conditioned to provide washed warm air in winter and cooled air in summer. Fresh air, drawn from the roof immediately above the room, is taken through the unit shown at the rear of the room to be filtered, heated or cooled and then discharged through anemostats located in the ceiling as can be seen in Fig. 9.

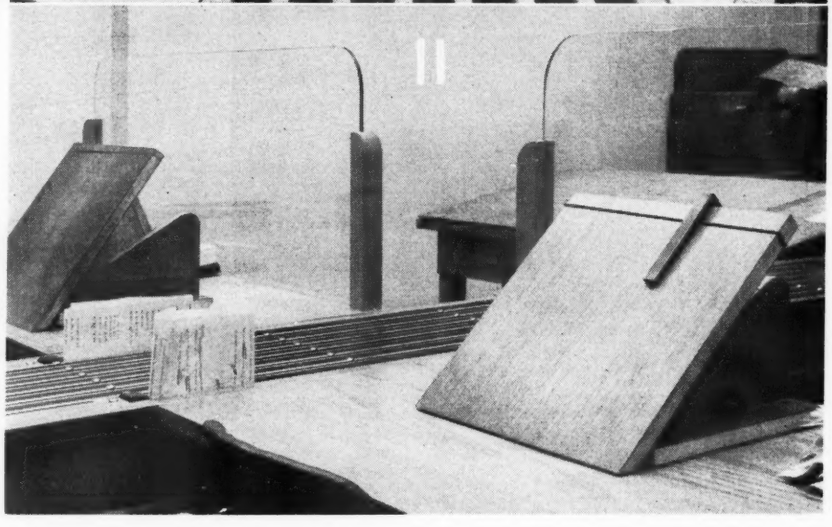
As explained previously, copy and proofs are delivered and returned by the conveyors shown in Fig. 4 and 9. The head proofreader is seated in the foreground at the head of the seven-lane trough conveyor and next to the two drag conveyor stations. The ad readers are situated around the large table with the head proofreader.

A large reading board, the angle of which is adjustable to the reader's preference, is provided at each of the four ad positions. Copy and proofs are distributed by the head proofreader and returned to him for rechecking if necessary, before returning to the ad copy desk.

A seven-lane trough conveyor, located in the center of the room, distributes copy and proofs to the news readers and copyholders seated at the six tables arranged at right angles to the conveyor and on both sides of it. Fig. 10 is the head







proofreaders' view of the distribution conveyor. This conveyor consists of an individual canvas belt running under each of the seven troughs. The troughs serve to hold the material upright as it is carried by the belts. It will be noticed that the trough stops at the particular table it serves. The belts run continuously and merely slide past the material when it is held stationary at the end of the lane. The center belt runs in reverse direction and is used to return the marked proof to the head proofreader.

In Fig. 11 are shown two of the proof tables with the conveyor running between them. Two pieces of copy can be seen at the end of the lanes serving these positions. A plate glass shield, 18 in. high, was installed on the front of each table to deflect the voices of the copyholder and proofreader from others in the room.

The quality of the lighting is indicated in Fig. 11 which was taken with only the general room illumination. The walls were painted to assist general illumination and to make the appearance of the room as pleasant as possible. The south and west walls are a very light green and the north and east walls a very light yellow-green. The wood trim and doors are painted with Eye Rest Green enamel, diluted with two parts white.

REVISED LIST OF EXHIBITORS

National Graphic Arts Exposition

Under date of March 10, the latest list of Exhibitors at the National Graphic Arts Exposition was released by the Exposition management. The Exposition will be held in Chicago's Amphitheatre on September 11 to 23 inclusive. Since the last announcement in December, considerable progress has been made in allocating booths to manufacturers and/or suppliers of equipment and supplies. One hundred and sixty-three firms have engaged booths.

The Exposition area totals 3 A., or 81,629 sq. ft. net on one floor, with the remaining area devoted to wide aisles to permit free movement of people attending the Exposition. Names of exhibiting companies which have been released by the Exposition management are as follows:

Acme Steel Co.
Aigner, G. J., Co.
American Evatype Corp.
American Printer, The
American Roller Co.
American Type Founders Sales Corp.
American Wood Type Mfg. Co.
Amsterdam Continental Type and Graphic Equipment Co.
Artype, Inc.

Babcock Printing Press Co.
Banthin Engineering Co.
Battelle Memorial Institute
Baum, Russell Ernest
Beal, Jack, Vertical Service
Bingham Brothers Co.
Bingham's, Sam'l, Son Mfg. Co.
Bookbinding and Book Production
Book Manufacturers' Institute
Bourges, Inc.
Brackett Stripping Machine Co.
Brandtjen & Kluge, Inc.
Bunn, B. H., Co.

Challenge Machinery Co., The
Chandler & Price Co., The
Chapman Electric Neutralizer Co.
Chemco Photoproducts Co., Inc.
Chicago Steel & Wire Co.
Chicago Typographers Assoc.
Commercial Controls Corp.
Consolidated Photo-Engravers & Lithographers Equipment Co.
Cottrell, C. B., & Sons Co.
Coxhead, Ralph C., Corp.
Craftint Mfg. Co., The
Craftsman Line-Up Table Corp.
Cutler-Hammer, Inc.

Dayton Rubber Co., The
Dexter Folder Co.
Dixie Type & Supply Co.
Doyle, J. E., Co., The
Dutro, Orville, & Son, Inc.

Economy Printers Products

Electric Boat Co. Printing Machinery Div.
Electro-Coatings, Inc.
Electro-Copyst, Inc.
Electrographic Corporation

Fairchild Camera & Instrument Corp.
Falco Corporation, The
Force, William A., & Co., Inc.
Fototype, Inc.

Gane Brothers & Lane, Inc.
Gegenheimer, William
General Binding Corp.
General Electric Co.
Graeber Stringing & Wiring Machine Co.
Graphic Arts Assoc. of Illinois, Inc.
Graphic Arts Equipment Co.
Graphic Arts International Corp.
Graphic Arts Monthly

Hamilton Mfg. Co., The
Hamilton Tool Co., The
Hammermill Paper Co.
Hammond Machinery Builders
Harris-Seybold Co.
Heinrich, H. H., Inc.
Hewson, The John, Co.
Hyre Electric Co.

Ideal Roller Co.
Imperial Type Metal Co.
Inland Printer, The
International Assoc. of Printing House Craftsmen, Inc.
International Typographic Composition Assoc.
Intertype Corporation

J C M Machine Co.
Jonas, Myron, Co.
Jones, C. Walker, Co.

Kemp, William M., Co.
Kimble Electric Div., Miehle Printing Press & Mfg. Co.
Kleen-Stik Products, Inc.
Korn, William, Inc.

Lanston Monotype Machine Co.
Lawson, E. P., Co., Inc.
Lester & Wasley Co., Inc.
Lithographers' National Assoc.
Lithographic Technical Foundation
Lewis & Co., A. F., of New York
Lockwood's, Inc.
Linotype Parts Co., Inc.
Ludlow Typograph Co.

Macbeth Arc Lamp Co.
Mann, George, & Co., Ltd.
Mergenthaler Linotype Co.
Miehle Printing Press & Mfg. Co.
Miller-Lauffer Printing Equipment Co.
Miller Printing Machinery Co
Mohr Lino-Saw Co.
Monomelt Co., Inc., The
Moore, Kenneth J., & Co.
Morrison Co., The
Murray Engraving Co.

National Assoc. Printing Ink Makers, Inc.
National Graphic Arts Education Assoc.
National Bundle Tyer Co.
National Lead Co.
National Safety Council
New Era Mfg. Co.
Nolan Corporation
Nu-Arc Company
Nygren-Dahly Co.

Oxford Paper Co.
Oxy-Dry Sprayer Corp.

Paasche Airbrush Co.
Pearce Development Co.
Plastic Binding Corp.
Potdevin Machine Co.
Printing Equipment Engineer
Printing Industries Equipment, Inc.
Printing Industry of America, Inc.
Printing Machinery Co., The
Printing Trades Blue Book
Production Yearbook
Process Color Plate Co., Inc.

Rapid Roller Co.
Rathbun & Bird Co., The
Regency Thermographers
Richards, J. A., Co.
Riehl Galley Lock Co.
Roberts & Porter, Inc.
Robertson, R. R., Co.
Rosback, F. P., Co.
Rouse, H. B., & Co.
Ryan, E. G., & Co.

St. Regis Sales Corp.
Schaefer Machine Co.
Seal-O-Matic Machine Mfg. Co.
Sheridan, T. W. & C. B., Co.
Sieb Mfg. Co.
Smythe Mfg. Co., The
Southworth Machine Co.
Spiral Binding Co., Inc.
Stereotex Machinery Co.
Stimpson, Edwin, B., Co.
Streamline Metal Feeder Co.
Strong Electric Corp.
Super Speed Printing Press
Sussin Mfg. Co.

Taft Contracting Co.
Taylor Machine Co.
Technical Trade School
Tenak Products Co.
Thomson-National Press Co., Inc.
Tompkins Printing Equipment Co.
Turner Printing Machinery, Inc.

United American Metals Corp.
U. S. Rubber Co.

Vandercook & Sons, Inc.
Verner, B., & Co.
Virkotype Corporation

Walden Sons & Mott, Inc.
Walton Laboratories, Inc.
Weber, Martin J., Studio
Western Newspaper Union
Wild & Stevens, Inc.
Williamson & Co., Inc.

PER Renews Research Contract

At a recent meeting in Columbus, Ohio, the directors of Photo-Engravers Research, Inc., authorized the renewal of its research contract with Battelle Institute. The renewed contract provides for the expenditure of $1500 per month for one year on problems of research of interest to the photoengraving industry. A progress report on PER research conducted at Battelle in the previous four months was presented before the directors by Dr. Donald J. Byers, of the Battelle staff. Associate memberships in the organization were also approved with Harris-Seybold Co. elected as the first associate member. The next meeting of the group will be held on October 8, 1950, at the Chalfont Hotel, Atlantic City, N. J.

Consolidated Expansion

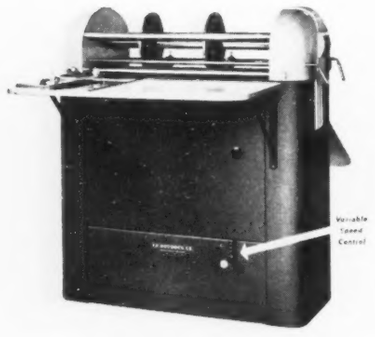
Consolidated Photo Engravers & Lithographers Equipment Co. has announced the expansion of its facilities by the purchase of a plant to house manufacturing operations. The new plant is located at 2155 Wabansia Ave. in Chicago. Sales and engineering departments will continue to be located at 2646 W. North Ave., Chicago.

EQUIPMENT & SUPPLIES

If you wish additional information concerning equipment, supplies and/or technical literature, please make your request to *Printing Equipment Engineer*, 1276 West Third St., Cleveland 13, Ohio.

Fire Hazard Index

RANDOLPH Laboratories, Inc., has issued a booklet entitled *Fire Hazard Index*, which lists in alphabetical order over 590 chemical, gas and common fire hazard materials. Opposite each material listed is the type of extinguisher or fire-fighting agent to use on each in the event of fire, as recommended by the Board of Fire Underwriters and the National Fire Protection Assoc. The 36 page, pocket-size booklet also contains basic facts about the principles of fire-fighting. Various types of fire extinguishers are illustrated and described.



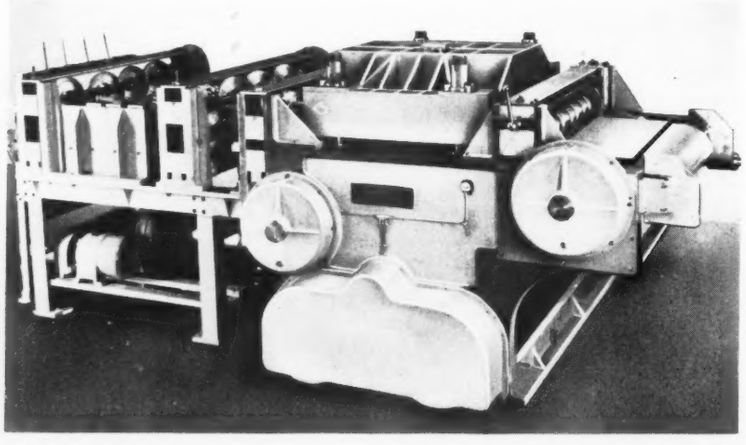
Round Hole Perforator—F. P. Rosback Co. has announced the Pony Vari-Speed Rotary Perforator equipped with a speed-changing unit to select the speed desired for operation. Perforating heads rotate at speeds of from 24 to 48 r.p.m. The machine has a max. sheet size of 30 in. by 30 in. Min. sheet size is 8 in. by 8 in. Continuous perforating can be done on sheets of any length that can be fed through the machine. From 2 to 10 sheets can be fed at each lift, depending upon thickness and character of stock. On strike (or skip) feeding, 3 or 4 sheets are usually the maximum for accurate work. Perforating heads are 10 in. diam. Floor space, 53 in. by 63 in.; weight, 700 lbs.

Kodak Filter Data

AN EIGHT page bulletin providing information on the use of filters with color film has been issued by the Eastman Kodak Co. Beginning with a discussion of the color quality of light sources, it carries through with technical information and charts to the care, cleaning and storage of the filters discussed. Information is also provided on Kodak Light Balancing Filters, Kodak Color Compensating Filters, filter recommendations for various light sources, special applications of filters, stability of filters, and filter sizes available. Entitled *Filter Data for Kodak Color Films*, the bulletin is punched to fit the Kodak Photographic Notebook.

Registerscope Bulletin

THE Taylor Registerscope, an instrument for obtaining make-up and register of forms on the imposing surface before going to press, is described in a four page bulletin issued by the Taylor Machine Co. Registerscopes can be installed on any semi-steel imposing surface. Available to fit the following standard sizes: 28 in. by 48 in., 39 in. by 65 in., 51 in. by 75 in., and 54 in. by 78. The Registerscope Jr., for make-up and register of forms up to 19 in. by 25 in., is also illustrated and described.



Carton Cutter and Creaser — Announcement has been made by Champlain Co., Inc., of a roll fed stationary carton cutter and creaser. The press uses ordinary chase type dies or steel rules and wood furniture or jigsaw cutting and creasing dies. Standard equipment includes a double roll stand. Sponsor states automatic stripping is available for average carton designs. Operated as an independent unit, the press can be used for inline production with rotogravure, aniline-anilox or letterpress equipment to provide finished printed cartons. The machine will accommodate die sizes 20 in. by 30 in., 27 in. by 30 in., and 36 in. by 30 in. Automatic electronic control equipment is available for registering the cutting and creasing operation with the pre-printed web.

Mounting and Proving Machine

THE improved 1950 model of the Mosstype Rubber Printing Plate Mounting and Proving Machine has been announced by Mosstype Roller Co., Inc. The machine is designed to facilitate mounting of rubber printing plates

Improved 1950 model of Mosstype Rubber Printing Plate Mounting and Proving machine.

on press plate cylinders with adhesive independently of the press, and to provide both a check on cylinder accuracy and proof of register in advance of press operation.

Improvements include: impression cylinder adjusting wheels located on front of machine instead of sides; dial indicator on straightedge for checking cylinder concentricity; relocating of dividing head locking pin for better visibility; locking devices for impression adjustment; heavier tie-rods; more provisions for lubrication, and a heavier cabinet base. Also featured as standard equipment is a gear motor for driving the plate cylinder.

Intertype Lydian Bold

INTERTYPE Lydian Bold with bold italic has been announced by Intertype Corporation. Both faces are available in sizes ranging from 8 to 36 pts. The two specimen lines shown below are set in the 14 pt. size.

Intertype Lydian Bold with *Bold Italic*

Intertype Lydian Light is also available in sizes up to and including 30 pt., according to an announcement by A. T. Mann, jr., Vice President of Intertype. A booklet showing both series is available.

Kodak Process Ektar Lenses

KODAK Process Ektar Lenses in shutters have been announced by the Eastman Kodak Co., in 12, 18, 24 and 30 in. focal lengths. Sponsor states the lenses have a fully-apochromatic optical system for color rendition and fine line resolution.

Kodak Process Ektar Lenses in shutters announced by Eastman Kodak Co. Fully-apochromatic optical system and built-in aperture control are features of the lens.

A self-contained aperture control is located within the lens itself on the enlarged portion of the lens barrel. According to Eastman, it permits the user to maintain the same relative aperture diameter and the same exposure from 10 to 300 per cent of copy size. This aperture control is the result of the design of the iris diaphragm leaf which permits uniform spacing of the aperture stop markings of the lens. This design also allows the Kodak Process Ektar Lens in shutters to be stopped down to aperture f-256.

Another feature of the lenses is a three-way flare control. This includes Lumenization or hard-coating of all air-glass surfaces, an improved interior barrel design, and a special coating of the edges of all optical elements with a black pigmented material.

Announces Three Items

AMERICAN Wood Type Mfg. Co. has announced the Double Wedge Midget Quoin, Duralumin lightweight furniture and the Holroyd perforator. Overall size of the Midget Quoin is $2\frac{1}{2}$ picas by 8 picas. Sponsor claims it is a positive-lock type quoin that will not slip. Other standard sizes include 4 picas by 12 picas and 4 picas by 21 picas.

The lightweight Duralumin furniture is available to fit standard wood imposing and furniture cabinets in 2 to 12 pica widths, 10 to 60 pica lengths, and in fonts and sorts.

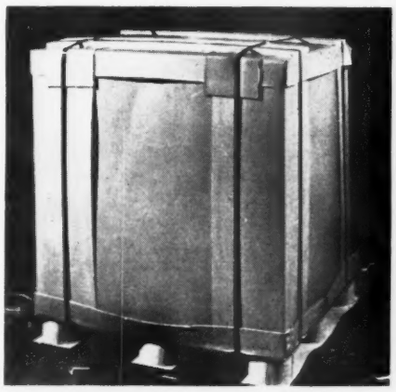
The Holroyd perforator is a device which is locked-up with the form to perform perforating operations simultaneously while printing. Sponsor states it is possible to perforate one or two ways with the device, for any length within 6 pts. of the type matter and will perforate any stock from onion skin to postcard.

Wire Stitcher Bulletins

BOSTITCH has issued a series of 11 illustrated bulletins describing the Bostitch book stitchers for use in the bindery and printing plant. The stitchers range from light to medium and heavy duty models for different types of work. Machines designed for stitching check books, book matches, pamphlets, score pads, magazines, booklets, cardboard boxes, novelties, cloth, wood, leather, light metal, and other similar items are included. Specifications are listed for each of the stitcher models.

Materials Handling Booklet

THE Electric Industrial Truck Assoc. has issued a 16 page booklet. The booklet contains a number of articles in which are described the manner in which paper manufacturers as well as newspapers and printing plants make use of storage battery-powered industrial trucks in the handling, storing and shipping of paper and printed products.



Expendable Pallets — The use of expendable, corrugated fibre-board pallets in shipping and storing roll and sheet paper stock of various types and sizes is explained in a 36 page manual issued by the Addison-Semmes Corp. The pallets, illustrated above supporting a shipment of paper, are available in two, three, four or more runner assemblies depending upon the load involved. Sponsor claims each post of the pallet will support a min. of 3000 lbs. Standard pallets weigh from 3 to 9 lbs. each.

Silversheen Inks

SIGMUND Ullman Co., Div. of Sun Chemical Corp. has announced that Silversheen inks are now available in 12 different color tones. According to M. J. Hoover, Eastern General Manager of Sigmund Ullman, no special handling is necessary to print with these inks. Silversheen ink with color added is used on solid areas and halftones of the winter issue of *Aluminum Bulletin*, the official publication of The Aluminum Association. Also announced are pale or rich Goldsheen inks, which, the sponsor claims, simulates the appearance of gold inks.

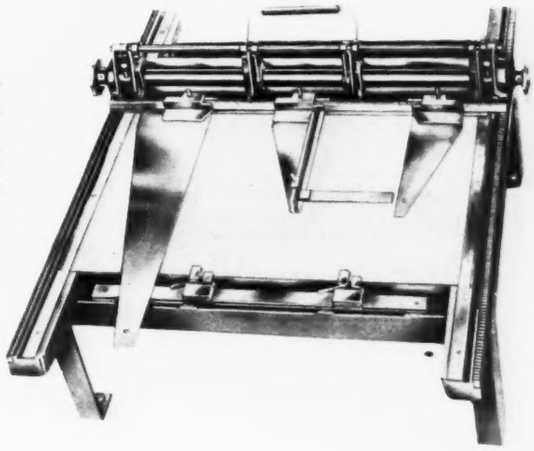
Craftsman Utility Table

CRAFTSMAN Line-up Table Corp. has announced the Craftsman Utility Table designed for use by the letterpress printer, lithographer, offset printer, label and carton printer, or photoengraver. Uses of the table, states the sponsor, include: line-up of press sheets; making layouts; register; ruling negatives, paper or glass; scribing register and stripping marks directly on the printing plate; masking; opaquing; stripping; superimposing; preparing copy paste-ups for offset reproduction; predetermining position; squaring engravings, negatives or plates; etc.

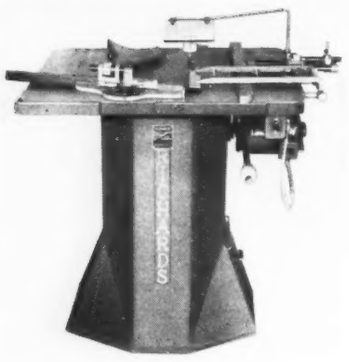
A double-edged straightedge permits working at the front or back of the table. The vision area of the $\frac{1}{4}$ in. thick grained glass is $22\frac{1}{2}$ in. by $28\frac{1}{2}$ in. The straightedge travels horizontally over the glass surface on geared tracks. The gear tracks extend at both ends so that straightedge clears the glass surface. The straightedge can be elevated up to $\frac{3}{8}$ in. above glass surface or lowered directly down on the work.

A rail with $\frac{1}{16}$ in. graduated rule (zero in center) is mounted on front and back of straightedge blade. Two 10 in. and one 22 in. steel triangles with sliding heads can be locked and held in position.

Table is furnished with a pair of combination sliding grippers and sheet stops for holding the work down, a Carboloy Scriber for ruling in printing plates, and $\frac{1}{64}$ in. match-plates mounted at each end of the straightedge carriage. The white enamel light box is equipped with fluorescent lights. Floor space, 36 in. by 36 in.



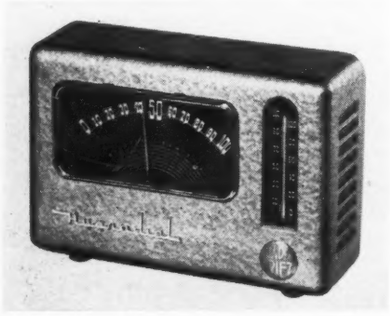
Craftsman Utility Table announced by Craftsman Line-up Table Corp. for layout, line-up, stripping, register, ruling, copy paste-up, opaquing and squaring operations.



Saw-Trimmer—J. A. Richards Co. has announced a saw-trimmer designed for photoengravers, electrotypers and stereotypers. Available in two models, features of the machine include a micrometer point system cross-cut gauge, micrometer point system ripping gauge, swing-up lining gauge, built-in chip disposal, and a waste material cart. The saw-trimmer is equipped with a fine tooth blade for flush-mounted cuts. Standard equipment includes a synchronous speed ¾ h.p. motor.

Dry Spray Unit

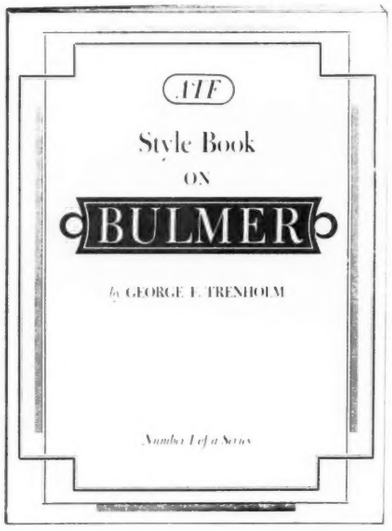
THE IDS Dry Spray Unit which sprays from two swivel-armed, 6-jet nozzles, is illustrated and described in a bulletin issued by International Dry Spray Corp. Sponsor claims the standard two-nozzle unit will cover a 35 in. by 45 in. sheet. Special four-nozzle units are recommended for 2-color presses, presses with a max. sheet size of 38 in. by 50 in. or over, and boxboard presses. The unit is mounted directly on the press, uses from 5 to 15 lbs. of air pressure, and is operated by moving parts of the press. Units are designed for each press delivery style.



Humidity and Temperature Indicator—A direct reading instrument which shows at a glance the relative humidity and temperature of the air to which it is exposed, has been announced by the Abbeon Supply Co. Designated the Hygrodial, the humidity scale is graduated into 10 equal divisions from 0 to 100 per cent over an area of 2½ in. The thermometer is a red liquid filled, lens front type, and is claimed to be accurate to within 1 deg. at 70 deg. F. The humidity sensing element is composed of 216 in. of fine blond human hair, which, according to engineers, is the most sensitive to changes in the atmospheric moisture content. Overall dimensions are 5⅜ in. long by 3⅝ in. high by 1 11/16 in. deep. Weight is 9 oz.

Poly Automatic Press

PARSONS & Whittemore, Inc., has issued an eight page bulletin describing the Poly Automatic High-speed Press of German manufacture. In the bulletin are illustrated various features of the press, such as the two-revolution system which permits using the return stroke of the bed motion for sheet delivery. Specifications of the press include: max. sheet size, 13⅜ in. by 19⅝ in.; max. form size, 12¼ in. by 17⅞ in.; inside chase measurements, 13⅜ in. by 18¾ in.; power required, 1½ h.p.; speed, 4000 i.p.h., and weight, 2800 lbs.



Bulmer Brochure and Specimen Sheets—American Type Founders has issued a type brochure accompanied by specimen sheets of Bulmer Roman and Italic, an AFT type face designed for use in magazine and newspaper advertisements, booklet covers, announcements, letterheads, labels, etc. The specimen sheets illustrate various blocks of the Bulmer face in sizes up to and including 14 pt., set solid and with two kinds of leading. Sizes are also illustrated in sufficient amounts on the other side of the sheets to show the effects of both capitals and lower case characters. Each size is accompanied by lower case alphabet length and set width per pica. All of the characters in a complete font are included.

Tag Stringer and Knotter

GRAEBER Stringing and Wiring Machine Co., Div. of the New Era Mfg. Co., has announced an improved model of the Graeber Tag Stringer and Knotting Machine. The running speed of the machine has been increased to 7500 tags per hr., states the sponsor. Other improvements include a positive knotting mechanism, an increase in the tag size handled (up to 6 in. by 12 in.), a magazine to accommodate a greater variety of tags, and an adjustment of string length. The machine is equipped with a counter and bell for signaling lots of 50 and 100 tags. Floor space is 42 in. by 45 in.

Foot Treadle Switch—Simonds Machine Co., Inc., has announced a foot treadle switch for forward and reverse motor operation. The double-throw switch consists of a pair of 6½ oz. Compact switches mounted on a cast aluminum base. Accidental operation of both switches at one time is prevented by a gap and low partition between each treadle. The switches are constructed of heavy gauge steel with black crackle finish and cork composition non-skid base. Weight of entire unit is 18½ oz.

Rotary Perforator-Scorer-Snapout Machine

DAVIDSON Perforator Co. announces it has installed in its New York office and showroom, under supervision of John A. Davidson, the 24 in. Davidson Friction Feed Rotary Perforator-Scorer, Snapout machine. Mr. Davidson states the sheets are under full control of the feeder rollers while the different operations are made. Changing from one style of wheel to another is accomplished without dismantling the machine. Each head is individually adjusted for position and impression. Speed range is stated to be up to 17,500 sheets of 8½ in. by 11 in. stock per hr. Plug attached to machine permits attaching to light socket or wall base outlet. Either a.c. or d.c. 110 v. equipment supplied.

Job Cost and Payroll Recorder—Designed for recording time in figuring job cost or payroll in the Card-O-Matic Time Recorder announced by the Cincinnati Time Recorder Co. The model illustrated above trips automatically and imprints the time when the card is inserted. Registrations are positioned on the time cards by a locator which protrudes from the card receiver. Models are available with electric motor drive or master clock operation. Specifications for the Card-O-Matic illustrated are 12¾ in. high, 11½ in. wide, and 6¾ in. deep.

Apex Imprinting Press

A HAND operated press has been announced by the Apex Machine Mfg. Corp., which will print illustrations, decorations, trade marks, trade names, advertising matter, etc., on pens, pencils, lipstick tubes, compacts, lighters, and other items. Sponsor claims the machine will print in any color on nearly all non-porous surfaces—round, flat, concave or convex.

Apex hand operated, imprinting press for printing on round, flat, concave or convex non-porous surfaces.

It is stated the machine prints from type, cuts or electros. Max. printing area is 3 in. by 4½ in. Speed of the press is between 500 and 800 i.p.h. In operation, the hand lever is lifted up and pushed back so the pad in the platen contacts the form. This action automatically inks the type or cut and takes an impression on the offset transfer pad. The lever is then lowered to normal position. The pad is a flexible cushion with a smooth surface. To receive the image, the object to be printed upon is manually pressed against or rolled over the inked pad by hand.

Expandable Binder

A BINDER designed with a flexible backbone that expands with additions and contracts with removals for accommodating individual publications, pamphlets, brochures, catalogs, price lists, etc., has been announced by C. E. Emmer & Co. Designated Bind-All, sponsor states it will bind one or many identical or dissimilar publications and presents a full bound appearance at all times.

Two coil springs mounted horizontally at the top and bottom of the backbone permit the binder to adapt its thickness to that of its contents and achieve space allowance within the binder. Individual rods lock into place by inserting the T-end tops and loop-end bottoms between the coils of the spring mountings. Publications to be bound are held individually by the running rod through the length of the book. Since each piece is individually bound, removal of any item is made without loosening any other piece.

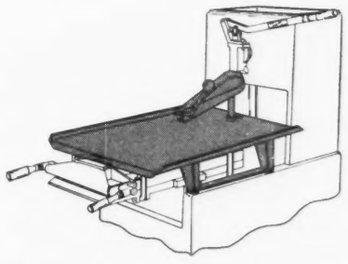
ATF Foundry Type Booklet

AMERICAN Type Founders has issued a 48 page descriptive price list of foundry type containing specimens of 260 ATF type faces. Also listed are foundry spaces and quads, Duratin leads and slugs, fonts of typographic accessories. The company's matrix preparation service for ad cuts and special typecast products in foundry lines are discussed. The cover for the 8½ in. by 11 in. booklet is printed in red, blue and black. A folder containing specimen sheets of Amsterdam Continental Type importations by ATF, is also available. Specimen sheets for Studio, Rondo, Libra, and the Egmont type family are included in the folder.

Numbering Machine Catalog—A 24 page catalog describing rotary numbering heads and flatbed typographic numbering machines, has been issued by Wm. A. Force & Co., Inc. Included in the manual illustrations of the different machine models, facsimile impressions of the various figures and skip wheel charts. The skip wheel charts will also be printed in card form for use in the shop. Copies of the catalog and chart are available.

I. S. Lift Jogger

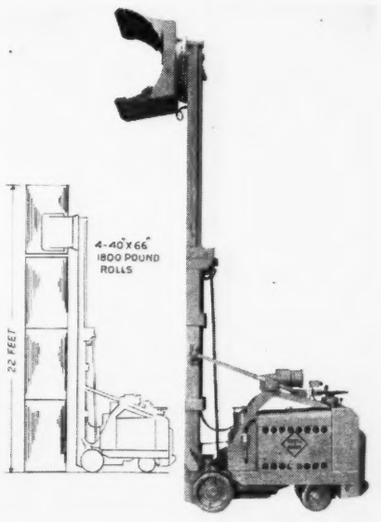
ILYA SCHEINKER has announced the Lift Jogger, a machine designed for jogging large lifts of paper. Sponsor claims the machine will jog up to 500 sheets of paper or more at one time of any size sheet. It is stated that the number of sheets jogged by the machine is limited only by the weight of the stock. Adjustments of speed and jogging power are made by turning a thumb screw. The Lift Jogger is available in all standard sizes and special sizes will be made to specification.



Hammond Pig Molder—Designed for use with either the 5 and 6 col. or full-page EasyKaster are two models of the Hammond Pig Molder announced by Hammond Machinery Builders, Inc. Both models are used in the same fashion—the metal is poured into the swivel trough which directs it to one mold, then another, etc., up to 5 molds. When not in use on the EasyKaster, the pig molder may be detached. Model 56 (illustrated) fits all models of 5 and 6 col. EasyKaster; Model 80 fits all models of the full-page EasyKaster with melting pot.

High-Lift Truck

ELWELL-PARKER Electric Co. has announced an electric power truck which stacks newsprint rolls four high to a top of 22 ft. above floor level. Standard size rolls are 40 in. diam., 66 in. long and weigh 1800 lbs. This truck, states sponsor, was designed for use in a Los Angeles newspaper plant.



Electric power truck announced by Elwell-Parker Electric Co., designed to lift newsprint rolls 22 ft. above floor level.

For a Chicago concern, Elwell-Parker recently developed a high-lift truck equipped with a rotary clamp. Paper rolls can be picked up in either vertical or horizontal position, reversed if necessary, and lifted to a top height of 17½ ft. for triple tiering. This was accomplished by increasing the length of the truck's telescoping uprights and adding an adjustable pressure type hydraulic clamp.

Magnesium Products

HILLS-McCANNA CO. has announced that various magnesium products are now available for use in the composing room, pressroom and stereotype department in commercial or newspaper plants. Some of the products available include magnesium composing room mounting base (for 16 ga. photoengravings, 0.105 in. and 0.152 in. electros and stereo shell casts), chases, proof press bed plates and furniture.

Vibration Control Bulletin

THE Korfund Co., Inc. has issued a four page bulletin explaining the characteristics of the various types of vibration isolation media used on equipment installations. Fifty typical machine and equipment applications are tabulated with recommendations for proper types of vibro-isolators, such as springs, cork or rubber. Various types of standard mountings are described with data or loading ranges which run from 10 lbs. for small isolators to 50,000 lbs. per isolator for a heavy duty spring type.

The ABC of OFFSET

For Letterpress Printers

By George Jos. Lenzer

III.—PHOTOGRAPH-HALFTONE

FOR black and white reproduction, we can include under this heading such copy as wash drawings, charcoal, Conte crayon and airbrush drawings, reproduction of which is accomplished by the halftone process (Fig. 4).

Copy of a photographic nature differs from a line drawing in, that it is composed of lines and graduated tones. The tones, ranging from clear white through a variety of grays to dense black, cannot be reproduced intact. They must be reduced to lines and dots that can stand apart to receive ink. This reduction of tones to a series of lines and dots is a supplementary procedure that distinguishes a photographic reproduction, designated as a Halftone.

Some photographic copy will contain tones in which there are no lines, but merely areas of white, gray and black; yet these areas are recorded on a halftone negative or positive as rows of dots in various sizes.

When photographing a photographic copy, the process photographer places a fine ruled screen (halftone) between the lens and the light sensitive film or plate that is to become the negative or positive. The ruling in Fig. 4a represents an enlarged halftone screen. An image transmitted through this screen is registered on the negative or positive as being composed entirely of dots and broken lines.

Thick lines are recorded as heavy dotted lines, and thin lines are recorded as rows of smaller dots. A comparative representation of this effect is shown in Fig. 4b. Black and gray tones of the original copy appear on the negative or positive as illustrated in Fig. 4c. Fig. 4d represents the dot formations as they appear on cross-sections of a negative and positive.

The dots shown in Figs. 4b, 4c and 4d are diagrammed in greatly enlarged form.

Since the wide range of continuous tones comprising a photo print cannot be reproduced intact, they must be reduced to a series of lines and dots. When an inked image is transferred from the printing plate to the paper, the dots do not show because they are so tiny and imperceptible as in Fig. 4e. They are there however, and may be perceived through a magnifier or microscope. This fact is made evident in Fig. 4f, where the reproduction is shown in greatly enlarged dot formation.

Screen Sizes

Halftones are made with different screens for different purposes, and are designated as being 55 line, 65 line, 85 line, 100 line, 110 line, 120 line, 133 line, 150 line and 300 line. The designations indicate the number of dotted lines or rows of dots per linear inch. Thus a square inch of a 100 line screen halftone contains 10,000 dots.

Halftone impressions or proofs, when pulled on blue-white or coated offset paper stock, can be used as photographic copy and can be reproduced as an enlargement or blow-up, or even at same size by Line Photography.

Easy Ways to Injure Copy

Pencil Marks on the back of unmounted photographs make an indentation which will register on a negative. If special marking or information is essential use a very soft pencil i.e. a 4B. Do not mark the print unless it is on a hard flat surface such as a glass top table. Never press

Fig. 4a.

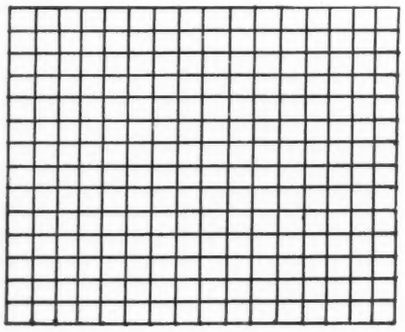


Fig. 4b.

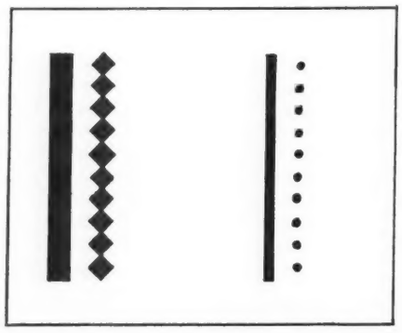


Fig. 4c.

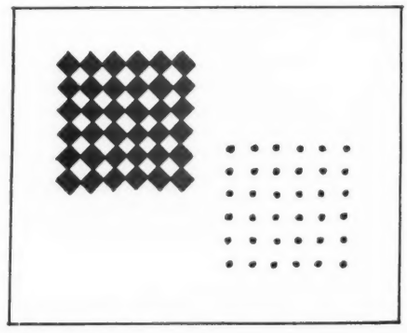


Fig. 4d.

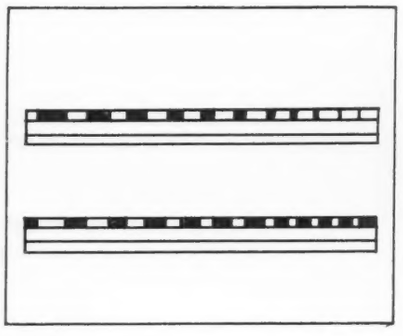
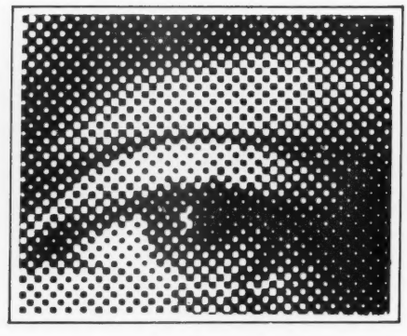


Fig. 4e.

Fig. 4f.



hard when writing. Better still, use a separate piece of paper, and fasten this to the print with self adhesive tape.

Paper Fasteners and staples should never be used because they will punch holes and make other indentations difficult to repair. Because the gelatine emulsions on photo prints are so soft, paper clips should not be employed. Indentations made by paper clips will photograph in the camera, and may require expensive retouching to correct.

Rolling Copy should never be permitted. Some artist's colors are chalky and brittle. Rolling may cause the pigment to chip and fall off, a damage sometimes difficult to correct. The emulsions on photo prints may crack, damaging already expensive retouching, and oftentimes requiring that the work be re-done.

Finger Prints can be the cause of serious damage to a photo print. They can also ruin fine airbrushing and color renditions. The gelatine emulsion of a photo print may accept the greasy impression of a finger print and if strong enough will appear in a lithographer's negative.

Oily Overlays such as wax paper or draftsmen's tracing paper should never come in contact with print surfaces. Atmospheric warmth or heat of the hand may melt the oily material to such an extent that even the lightest pressure of a finger will transfer oily particles to the copy surface, thus easily ruining a photo print or expensive art work.

Face to Face Mailing or Handling of Photo Prints from place to place should be avoided. Dirt or fine particles of grit may lodge between the prints, and damage not one, but *two* prints at the same time.

Shipping Without Protection is dangerous to photo prints, and valuable art work. The warning *Do Not Fold* is not enough. All art work and photo prints should be placed between two heavy pieces of cardboard. Thin corrugated paper and some standard mailers are too thin and bend easily. The extra precaution in protection plus a few cents extra postage is cheap insurance, so, play safe and protect all art work and photo prints.

IV.—HANDLING COPY WHEN RECEIVED

A NUMBER of injuries may have occurred to the copy by the time it is delivered to your plant if it has not been handled carefully. Also, the customer may provide existing art copy which may have been damaged during handling at the time of the previous job or which has been taken place in storage. Some suggestions for handling such copy are as follows:

Major Injuries: If details are obliterated, paste-ups become separated or are distorted due to any cause, reference should be made to the customer immediately. Never attempt to correct or reassemble.

Minor Injuries such as tears, scratches, stains, folds and creases are corrected during reproduction, unless such injury extends into vital areas of the copy and can be classed as a major injury.

Mend all tears, by joining on the back, using rubber cement or Scotch tape. Never apply tape or patches to the face of copy because they photograph differently and show edges on the negative which may become difficult to correct. Do not use gummed tape or water soluble pastes in attaching patches because they distort copy.

Minor scratches, chipping of ink, or gray lines or lettering should be corrected on the negative for all but the simplest jobs.

Grease and oil stains on copy require special consideration. No attempt should be made to remove them with any solvent because some solvents may cause the oi or grease to spread, inked impressions to bleed, or loosen stick-ups from their base. Yellowish stains can be removed photographically, using orthochromatic films or plates with a yellow K2 filter. If stains reproduce, they should be corrected on the negative.

Some creases and wrinkles can be minimized by proper camera techniques, but better results are obtained by remounting on a fiberboard base.

No copy should ever be rolled, and if received in a rolled condition, must be flattened carefully to avoid creases or surface cracks.

Masking

White Masks — White paper masks around copy, on areas where the work is to be deleted, and on large blank areas of copy that are soiled or spotted. White masks can reduce the amount of opaquing required on the negative.

Black Masks—Black paper masks, cut from paper such as is inserted between films and plates, will produce clear areas on negatives for stripping in halftone or line films. In some instances, the same effect can be obtained by using deep red cellophane or acetate. An advantage in using the red mask is that of its transparency, by reason of which greater accuracy can be obtained when cutting.

Black masking paper can also be used as a backing for thin copy which is printed on both sides. When used in this way, the blank paper tends to prevent detail on the back from showing through and recording on the negative.

Mounting Stick-Ups

Rubber cement is the best adhesive for mounting stick-ups. It must have proper consistency to adhere to the paper

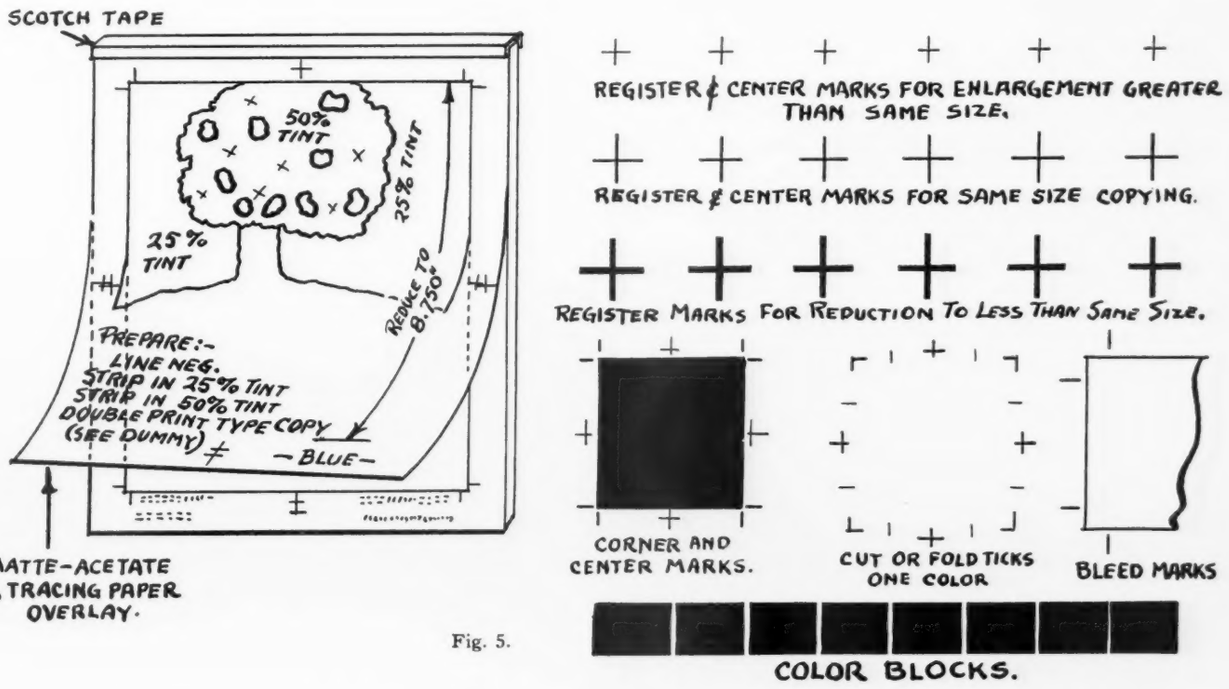


Fig. 5.

mount without penetrating into and staining the paper.

Type impression stick-ups on thin tissue or rice papers should be mounted on blue line drawings or prints with a gum arabic solution, (mucilage).

Reference Marks

All copy should have register, corner, cut and trim, folding, crop, bleed and other reference marks as a guide for all operations, especially for color register. Here again is something requiring close attention and consideration. Too often marks are treated in a haphazard manner, which can result in serious register trouble.

These marks, generally fine black lines, are illustrated in Fig. 5. Since most copy is received without reference marks, it is wise to prepare printed copies of reference marks, imprints, color blocks, credit lines and other standard data. Because work areas on most jobs do not have true alignment on all sides, being broken up into various shapes and forms, such as curves, angles, blank spaces and solid boxes, it is essential that corner and center marks be carefully located.

The corner and center marks are used by the pressman in squaring the work with the sheet.

All reference marks should be affixed outside the work area, unless their subsequent removal can be effected without damage to the original art work, then and then only should they be permitted within the work area.

For reasons of cleanliness, in handling copy and for incorporating necessary information, tracing paper or acetate overlays should be used; see Fig. 5. When information must be written or indicated on the original copy itself, then a light blue crayon pencil should be employed.

Copy Preparation for Camera

The artist or person whose duty it becomes to prepare copy for the camera must make the following corrections and preparations:

Add register and reference marks (Fig. 5).

Correct injuries where possible.

Clean copy.

Fill in broken lines and characters, and touch up where needed.

Surround copy with white paper mask to reduce opaquing on negatives.

Attach loosened stick-ups.

Indicate color separations on overlays.

Make corrections on copy when necessary.

Corrections

To avoid serious errors, corrections involving composition, detail and positions should not be made on the original copy but on the negative, positive or press plate. Changes on the original are made only with the customer's approval.

Some Things to Remember

(1.) *Keep Copy Clean* by providing protective covering. Tracing paper or clear acetate sheeting taped to edges permits inspection without exposing the surface to dirt, fingerprints and other possible soilage. (See Fig. 5.)

(2.) Avoid glossy copy, photo prints and art work, because surface reflections can cause local blind areas, resulting in weakened or blind dot formations in halftones and overly dense areas on negatives or positives.

(3.) Use dull coated or semi-matte drawing paper for all art work. It must be free of spots, black or colored specks and noticeable surface texture.

(4.) Where accuracy is required, mount drawing paper or photo prints on metal or fibre board before having any art work done.

(5.) Black india ink should be used for all black and white line drawings. Lines and lettering must be clean-cut and opaque for satisfactory reproduction. For large solid areas, it is advisable to use black or dark red tempera water-colors instead of India ink, because large areas of India ink will gloss and result in defects explained in installment No. 2 (See March 1950 issue).

(6.) Attach paste-ups with non-discoloring paste or rubber cement. Edges must be clean and must stick closely.

(7.) All pertinent information concerning final size, colors, length of run and nature of stock, should be filled out on a separate form which should be attached to the copy, so all required information is obtained.

(8.) Be sure that a dummy or mock-up accompanies all copy. This dummy or mock-up should include individual color separation drawings if copy is to be a fake color reproduction; color swatches and a sketch showing final color plan of finished job.

(9.) Do not forget that reductions in size also reduce size of type and width of rulings. Lines or characters may fill in if too thin or closely spaced.

(10.) All jobs must be within specified sizes and capacities of reproduction equipment.

(11.) Put corner, center, cut and fold, bleed and other reference marks on all copy. (Fig. 5.)

(12.) Be sure that all photographic copy supplied for gang reproduction is of the same tonal contrast and range.

(13.) Where possible, scale and prepare photo prints and drawings so they all require the same percentage of enlargement or reduction.

(14.) Estimate carefully total requirements for proofs, prints and finished impressions. If too few are requested, time is wasted preparing re-runs. If too many are requested, paper, supplies and storage space is wasted.

(15.) Mark corrections and alterations on tracing paper or acetate overlays instead of on the copy. Write lightly, or insert plastic protective sheet to avoid indenting the copy. Use light blue pencil for noting data or instructions on the margin of copy, if such notations are needed. (Fig. 5.)

(16.) To speed up work, plan to run more than one job in gang formation, if the number of run and nature of jobs are similar or adjustable.

(17.) Be sure that a sample of the actual stock which is to be used for the job accompanies all art work and copy released for processing. This is important because the color tint of the stock may have direct bearing upon the processing methods and upon the final results obtained.

(*To be Continued*)

ATF Incentive Posters

A continuing drive in the plants of the ATF Incorporated group of companies aimed at tightening production, cost and quality standards, has enlisted the aid of a new character named Wastie, central figure in a series of cartoon-style incentive posters. The cartoons portray Wastie eating profit and enjoying oil-slick, accident-causing floors. He dotes on slipshod methods that make the scrap pile grow, and is passionately fond of the lazy and forgetful. Sample sets of the posters for reproduction and use by other companies in their plants are available on request to ATF's Human Relations Dept.

Portable Exposing Unit

MILLER-TROJAN Co., Inc., has announced the Black Magic Exposing Unit consisting of eight black light tubes used in the production of photographic silk screen stencils. The eight light tubes, 17 in. long and 1 in. diam., are mounted in a specially designed reflector and controlled by an automatic time switch. The unit may be plugged into any 110 v., a.c. light socket.

The exposing unit is designed to be used in conjunction with the Porto-Frame, a 12 in. by 24 in. portable vacuum printing frame. The frame is equipped with a vacuum pump motor, housed in one unit. For exposure, after loading and locking the vacuum frame, the Black Magic exposing unit is placed face downward on top of the vacuum frame. The Porto-Frame may be laid flat for horizontal exposure to photo-flood bulbs or hung on a wall for exposure to arc lights.

Hourly Production Tables

AMERICAN Type Founders has issued a booklet entitled *Hourly Production Tables* which eliminates the necessity for arithmetical calculations in figuring rotogravure press production. In the booklet is contained the number of impressions per hour for all cylinder circumferences from 12 to 48 in. at running speeds from 100 to 850 f.p.m. Requests for the booklet must be made on company letterheads. Another booklet, *Cylinder Calculator*, which shows cylinder diameters for all cylinder circumferences from 1 to 60— in., is also available.

Exposition Previews

From time to time, *Printing Equipment Engineer* will publish pre-views of manufacturer and supplier exhibits to be held at the National Graphic Arts Exposition, Chicago's International Amphitheatre, September 11 to 23. Our executive readers can read about proposed exhibits in these previews and make a mental note to call upon exhibitors' representatives when in Chicago.

Intertype Fotosetter The Intertype Fotosetter machine will be on public display by Intertype Corporation for the first time at the Graphic Arts Exposition in Chicago's Amphitheatre, from September 11 through 23. This machine is the photographic equivalent of the hot-metal line-composing machine. The product of the machine may be used in letterpress and offset platemaking and in gravure plate and/or cylinder making. This is in the form of text, display and tabular matter on film or photographic paper. Manufacturer states the speed of the machine exceeds any operator's ability to compose and production compares favorably with that of the slug machine.

Eleven different type sizes are obtainable from two basic font sizes. A four-magazine machine, with eight lenses, will produce 32 different type sizes. Type face sizes range from 4 pt. to 36 pt. inclusive. Lines of any length may be composed up to and including 42 picas. Justification of the photographic matrix lines is automatic.

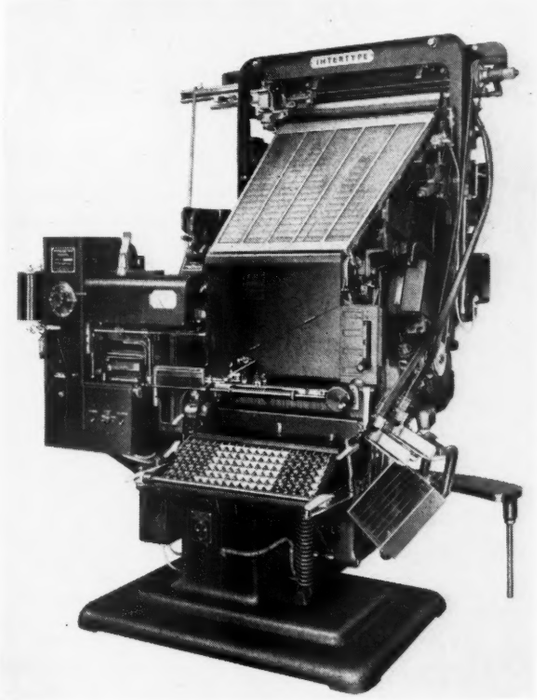
The 117-channel magazines accommodate three complete fonts of photographic matrices.

Mixed composition, such as light and bold face, and light and italic may be set in the same line. The lens turret carries eight pre-focused lenses for obtaining point size of letter characters.

The film container holds 20 ft. of film in a continuous roll. Any amount of exposed film can be removed at any time in daylight. Film positives, film negatives, and paper positives are obtainable directly from the machine. The film positives and negatives provide emulsion-to-emulsion contact for making lithographic, gravure and photoengraved plates.

Proofs of film composition can be produced by Ozalid and Multilith equipment.

Mechanical corrections are provided by a corrector using locating pins and register holes punched automatically in the film. Page makeup is facilitated by an illuminated vacuum table adapted to register holes in the film.



The Intertype Fotosetter, which will be exhibited for the first time by Intertype Corporation at the National Graphic Arts Exposition. The machine is the photographic equivalent of the hot-metal line-composing machine.

Plastic Binding Machines Plastic binding of printed, typewritten, or other loose material will be demonstrated at the exhibit of General Binding Corp. during the National Graphic Arts Exposition to be held in the International Amphitheatre, Chicago, September 11 to 23.

Designed for operation in the bindery or an office is the Model 12 plastic binding equipment. The equipment, which will accommodate material up to 12 in. long, consists of a punching machine and a binding machine. GBC states the table model equipment will bind booklets, presentations, reports, manuals, duplicated pages, photographs, catalogs, price and parts lists, instruction manuals, reference materials, etc. The Model 12 equipment will be on display at the General Binding Corp.'s booth.

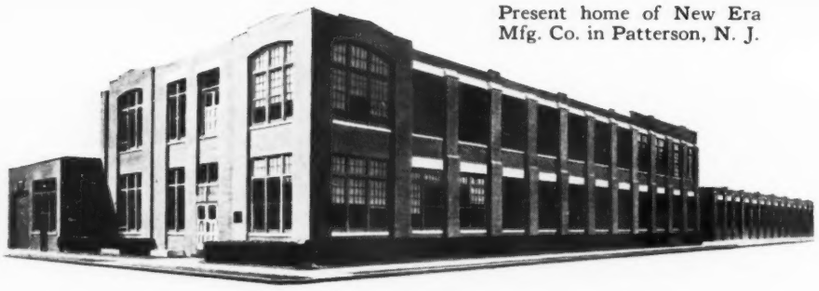
In operation, the sheets and covers to be bound are punched on the hand punching machine, which makes rectangular holes. A Vinylite plastic comb is placed on the table model binding (comb spreader) machine. The rings of the binding are opened simultaneously by a lever. The punched book and covers are slipped over the rings of the plastic binding strip. The handle is released, the comb rings close automatically and the finished plastic-bound book is lifted from the machine.

The Model 12 Plastic Binding Equipment shown here will be exhibited by General Binding Corp. at the National Graphic Arts Expotion. The equipment consists of a punching machine and a binding machine.

The plastic binding is available in two styles, narrow-back for back-to-back turning, and wide-back for two-piece cover styles.

Other models to be exhibited include the table Model 16 which has an additional 4 in. section of punching dies, permitting the simultaneous punching of a 16 in. sheet. The GBC Heavy Duty Power Punching Machine and the semi-automatic Binding Machine will also be shown.

Production and Mechanical Executives are invited to submit to the editor informally in a letter devices which have helped production in their plants.



Present home of New Era Mfg. Co. in Patterson, N. J.

New Era Mfg. Co. Observes

Golden Anniversary

PROGRESS in the development of multi-process presses for commercial and specialty printing during the past 50 years is being commemorated by the New Era Mfg. Co. of Paterson, N. J. The first New Era press designed for printing and fabricating both tickets and labels in one operation had its origin in a small shop in Peabody, Mass., in the gaslight era of 1900.

Multi-Process Development

With the introduction of the early New Era Presses, the economies of operating an automatic roll-fed press for printing both sides, punching, perforating, numbering, and rewinding or cutting off tickets were quickly recognized by the printing industry. As the specialties business increased, a demand was created for a tag-making press. In 1905, a unit was developed which attached a reinforcement patch and eyelet to the tag. This was followed a few years later by the development of units for steel rule dies and male and female dies. These units were used for dieing out various shaped labels, merchandise tags, display cards, cartons, etc.

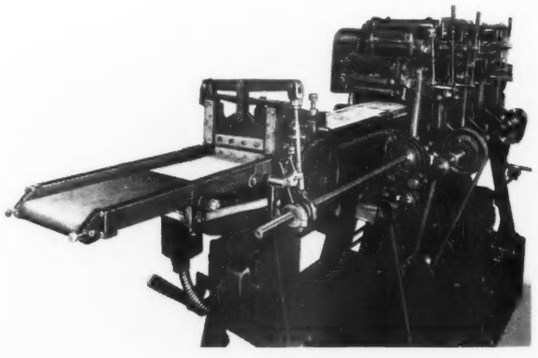
Many other specialties that owe their creation to the versatility of New Era equipment are: covers for match books produced for the Ohio Match Co., Universal Match Co., and Diamond Match Co.; meter charts for the large instrument companies such as Westinghouse Electric and Mfg. Co.; drinking cups and cup lids, printed and died-out for companies like the Lily Tulip Cup Corp., and Individual Drinking Cup Co.

Printing Commercial Forms

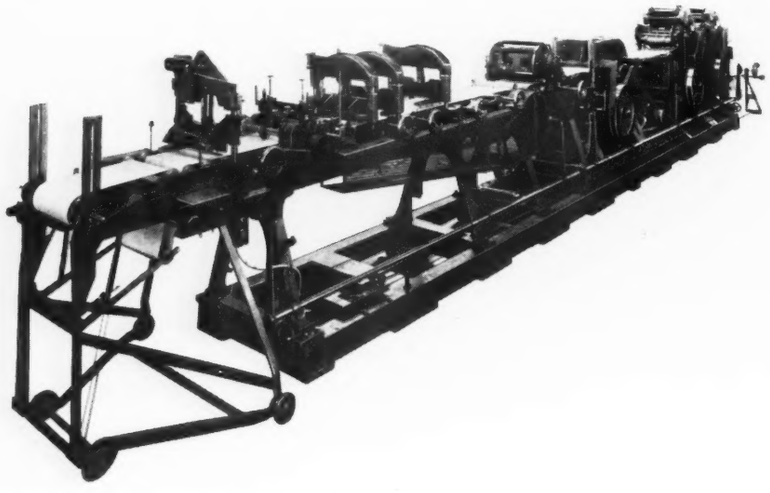
These roll-fed presses were also designed for printing commercial forms. It was found that it was possible to put a roll of paper on the back of the press, print any number of colors, punch the round corners, slit, perforate and complete the forms in one operation. New Era machines are also used for counter register forms, snap out forms, and continuous forms. New Era Presses are used by the Standard Register Co., Potter Press; Connecticut Manifold Forms Co.; Autographic Register Co.; Phillip Hano Co.; and many others.

Continuous Form Equipment

Another machine was developed by New Era for the continuous form field due to the holes in the carbon paper being larger than the holes in the printed form. This equipment, known as the New Era Carbon Processing Machine, takes a roll of carbon paper, punches the holes down the side, cuts a tab to aid in removing the carbon from the form and delivers the finished product in zig-zag packs from 4 1/2 in. to 11 1/2 in. In 1919 the company developed tabulating card presses for the International Business Machine Corp., and Remington Rand, Inc.



The original New Era Multi-Process Press manufactured in 1900 is still producing labels and tags.

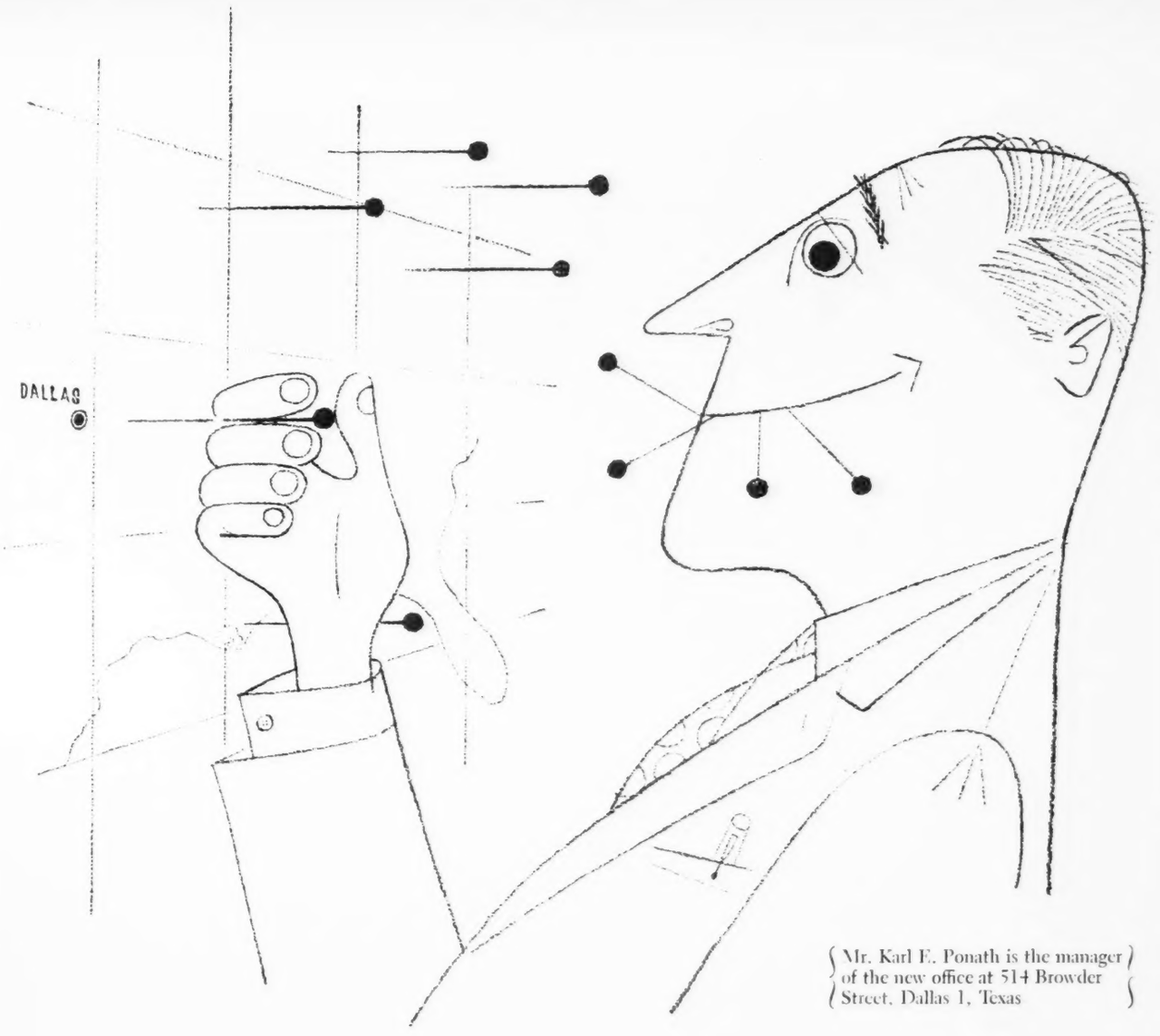


1950 Model of the New Era Multi-Process Press for printing and fabricating labels, tags, tickets, office forms and small cartons in multi-color.

Zig-zag and Snap-out Work

A machine which would collate the various forms from the roll into zig-zag packs or snap-out forms followed. In 1927 the New Era Automatic Collating Machine was announced which accommodates seven printed webs and six carbon webs. As forms changed from stitching to glueing operations, the equipment was modified to meet those requirements.

New Era developed five sizes of rotary offset presses during the period of 1934 to 1938. Standard Register Co. and Recording and Statistical Co., are two users of this equipment. The manufacture of offset equipment, however, has been discontinued. (*Continued on Page 57*)



Mr. Karl E. Ponath is the manager of the new office at 514 Browder Street, Dallas 1, Texas

Linotype e-x-p-a-n-d-s its service to its customers

. . . OPENING OF DALLAS OFFICE FIRST STEP IN NEW DISTRIBUTION PROGRAM

A quick look is enough to show that the country is growing, population centers shifting —breaking down old, outgrown distribution patterns.

But it took a longer look—two years of exhaustive research—to show how Linotype could *best* expand its services and realign its operation to serve the changing needs of the graphic arts industry.

First step in a comprehensive program based on this study is the opening of a new Linotype office in Dallas. Other offices will be opened to give you the service and parts you want *when* you want them. For your greater convenience, substantial stocks of parts and supplies will be maintained at each office.

MERGENTHALER LINOTYPE COMPANY

29 Ryerson Street, Brooklyn 5, New York

LINOTYPE TRADE MARK

LEADERSHIP THROUGH RESEARCH

Linotype Electra, Gothic No. 18 and the Spartan Family

ANPA Exhibit Previews

Hammond Machinery

Hammond composing room saws and stereotype equipment will be featured at the exhibit sponsored by Hammond Machinery Builders, Inc., at the ANPA Mechanical Conference to be held at Hotel Statler, Buffalo, N. Y., on June 12, 13 and 14. Mechanical and production executives in attendance will be afforded the opportunity to see Hammond's Glider TrimOsaw, Mercury TrimOsaw and Ben Franklin TrimOsaw.

Stereotyping machinery to be displayed consists of Hammond's Full-Page Scorcher, Full-Page EasyKaster, Stereotype Glider TrimOsaw, Radial Router and Full-Page Shaver. The manufacturer states that this equipment was designed to fit the flat stereotyping requirements of the large weekly and the small and medium size daily newspapers. The EasyKaster "8" is equipped with a thermostatically controlled, 800 lb. capacity melting pot and automatic bed lock-up.

Features of the Full-Page Shaver include a ball bearing table, tungsten carbide tipped knife blade and heavy duty roller chain drive. Sponsor claims these features reduce the power requirement by 70 per cent—from 5 h.p. to 1½ h.p. It is also claimed that a full length plate can be shaved in 12 sec. on this machine, and a half length can be shaved in 6 sec.

According to Hammond, the Ben Franklin TrimOsaw will perform such operations as sawing full-page type high stereos with a table extension, saw and trim one or a handful of slugs, mitering, inside and outside mortising, square plates with line-up gauge and saw variable measure composition with line-up gauge.

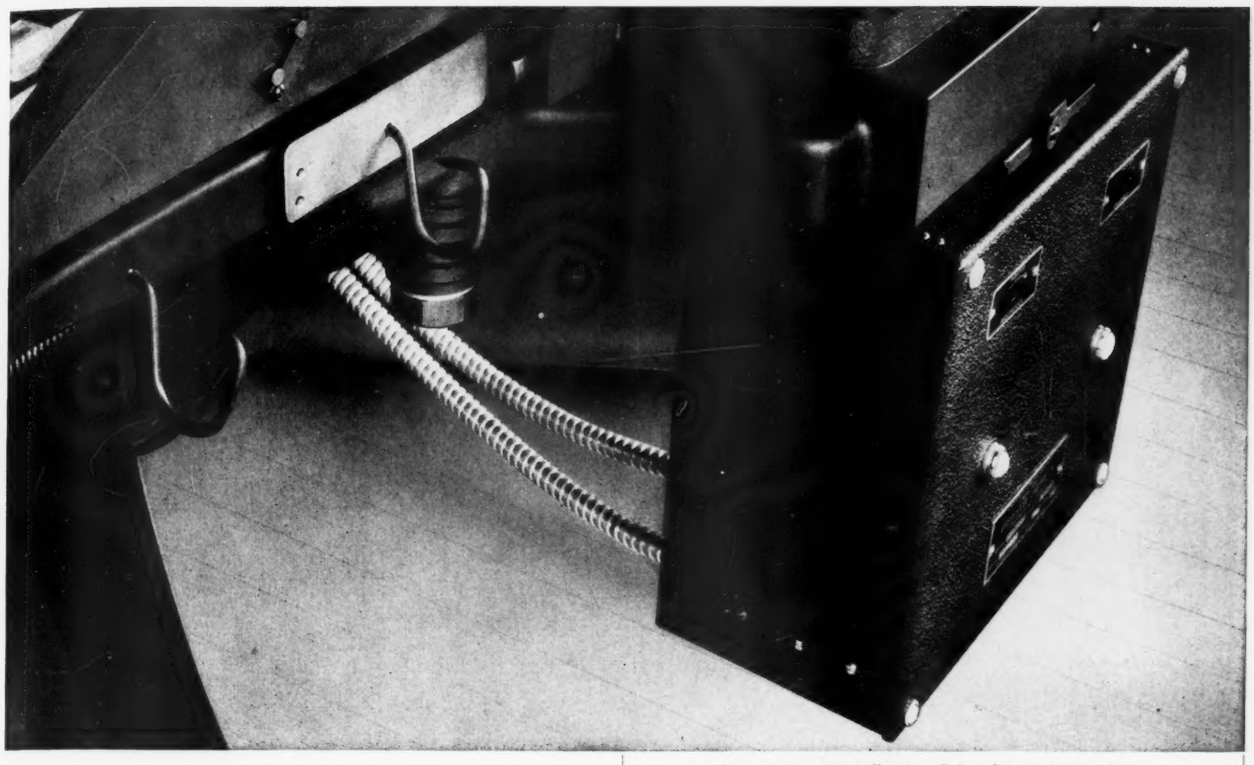
Hammond Full-page Shaver to be exhibited at annual ANPA Mechanical Conference to be held in Buffalo, June 12, 13 and 14.

Exhibit Spaces for ANPA Mechanical Conference

Just before going to press with the April issue, 45 manufacturer and/or supplier firms have engaged 82 booths for the ANPA Mechanical Conference to be held at Hotel Statler, Buffalo, N. Y., on June 12, 13 and 14.

A limited number of unengaged booths remain. If any manufacturer and/or supplier wishes to exhibit his products at the forthcoming ANPA Mechanical Conference, please write PRINTING EQUIPMENT *Engineer*, 1276 West Third St., Cleveland 13, O. The companies already engaging exhibition space together with their booth numbers are as follows:

Exhibitor	Booth No.
Alico, Incorporated	11
American Steel Chase Co	28
American Type Founders	67, 68, 69, 70, 71
Beard Newsprint & Warehouse Co.	72
Bourges, Inc	50, 51
Chemco Photoproducts Co	4, 5, 6
Collmar Corp., The	60
Consolidated Photoengravers & Lithographers Equipment Co.	39, 40, 41, 42
Coxhead, Ralph M., Corp	77
Dick Mailer, The	86
DoALL Co., The	31
Eastern Graphic Arts Supply Co	85
Fairchild Camera & Instrument Corp	19
Federated Metals Div. American Smelting & Refining Co.	57, 58
Gaebel, Arthur H., Inc	18
Hammond Machinery Builders	55, 56, 65, 66
Imperial Type Metal Co	14, 15
Lake Erie Engineering Corp	83, 84
Linotype Parts Co	20, 21
Ludlow Typograph Co	48, 49
Mark Specialty Co	59
Minnesota Mining & Manufacturing Co	61
Monomelt Co., Inc., The	30
Morrison Co., Inc., The	80, 81, 82
National Lead Co.	25, 26, 27
Nolan Corporation	45, 46, 47
Pitman, Harold M. Co	76
Printing Equipment Corp	64
PRINTING EQUIPMENT *Engineer*	22
Reilly Electrotype Co	1, 2, 3
Reppenhagen, Frank A., Inc. Sales Representatives, The Moreland Corp	29
Richards Co., J. A	37, 38
Robertson, R. R. Co	78, 79
Rolled Plate Metal Co	43, 44
Rouse, H. B., & Co	75
Sta-Hi Corp	16, 17
Stereotex Machinery Co	36
Teaneck Chemical Co., Inc	35
Teletypesetter Corporation	62, 63
Tingue, Brown & Co	34
United American Metals Corp	7, 8
Vandercook & Sons, Inc	52, 53, 54
Wesel Mfg. Co	32, 33
Western Newspaper Union	9, 10
Wood Newspaper Machinery Corp	23, 24



The standard installation of the Electronic Heat Control—mounted on the base of a Linotype machine.

"Linotype's Electronic Heat Control Gives Remarkable Performance"

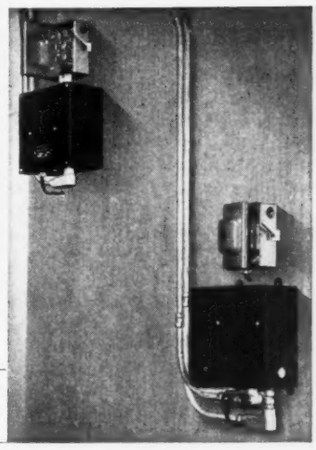
—DAVID W. HOWE, Business Manager

The Burlington Free Press

"It has been over a year since we installed our first Electronic Metal Temperature Control. During that period, the control has required only one change in temperature setting. The original Thyratron tube is still in use. The performance of the unit has been remarkable when you consider our straight matter machines are Teletypesetter-operated and this particular machine turns out reading matter 19 hours a day.

"Since the original installation, we have installed another Electronic Control on a panelboard large enough to accommodate 10 more controls which we plan to install sometime in the future. With the panelboard idea, controls are placed away from the machines to permit easy access for checking and maintenance purposes. Pilot lights on the controls are easily visible for all machines and troubles can be spotted at a glance."

The Linotype Electronic Heat Control was field tested for almost 3 years in composing rooms having unusual control problems. Perhaps you, too, can benefit from its extremely close temperature regulation. It can be ordered for new machines at additional cost or purchased for outstanding equipment. Available for 110- or 220-volt, 50 or 60 cycle, a. c. only. Call or write your nearest Linotype representative for more complete information.



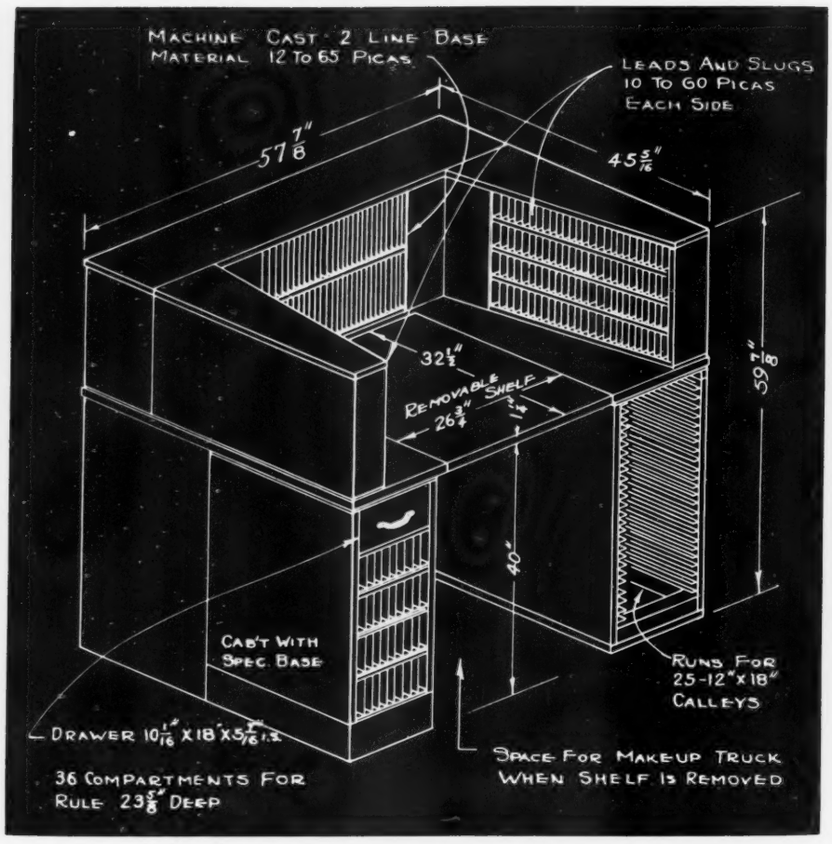
Linotype Electronic Controls mounted on a panelboard at the Burlington Free Press.

LINOTYPE
TRADE MARK

LEADERSHIP THROUGH RESEARCH

MERGENTHALER LINOTYPE COMPANY • 29 Ryerson Street, Brooklyn 5, New York

Set in Linotype Corona, Erbar and Spartan


MACHINE CAST 2 LINE BASE MATERIAL 12 TO 65 PICAS
LEADS AND SLUGS 10 TO 60 PICAS EACH SIDE
57 7/8"
45 5/16"
32 1/8"
REMOVABLE SHELF
26 3/4"
59 7/8"
40"
CAB'T WITH SPEC. BASE
RUNS FOR 25-12"X18" GALLEYS
DRAWER 10 1/16" X 18" X 5 5/16"
36 COMPARTMENTS FOR RULE 23 5/8" DEEP
SPACE FOR MAKEUP TRUCK WHEN SHELF IS REMOVED

Work Simplification Equipment

At the April meeting of the PNPA-NJPA Mechanical Conference, Ray C. Cook, Sales Director, Hamilton Mfg. Co., discussed new units for use in composing rooms. These might be termed work simplification units which provide all the necessary materials at the compositor's finger tips for the making up of full-page advertisements. While the cabinets were designed primarily for newspaper work, they could be modified for any type of publication of specialty assembly.

Mr. Cook credited development of the Island Makeup Cabinet (in diagram above) to one of the metropolitan newspapers on the West Coast. A great deal has been said recently about "bringing the work to the man" or to provide equipment containing materials which will enable him to do his work without unnecessary footwork.

He stated that the Island Makeup Cabinets for newspaper work are made with a worktop or shelf which can be removed and a page makeup truck rolled into the open space.

In the diagram, the rear compartments are designed to contain two-line base material, from 12 picas to 65 picas, or the compartments can be furnished according to the specifications of any particular composing room.

On the left and right-hand sides are vertical racks containing 2 pt. leads and 6 pt. slugs in measures ranging from 10 picas to 60 picas, or whatever requirements are dictated by the individual plant.

At the lower left-hand side there is a cabinet with 36 compartments for strip materials. If preferred, this space can be provided with all or part bins for base material.

At the lower right-hand side are runs which will accommodate 25 galleys (12 in. by 18 in.). Alternative arrangements can be supplied for full column length galleys in single, double or triple widths.

In the Island Makeup Cabinet shown in the diagram above, it is intended that a common saw-trimmer and mitering machine be placed between two of the cabinets for use by two compositors.

Mr. Cook also explained another type of Island Makeup Cabinet which is provided with a bench saw-trimmer for the individual use of the compositor working at the cabinet.

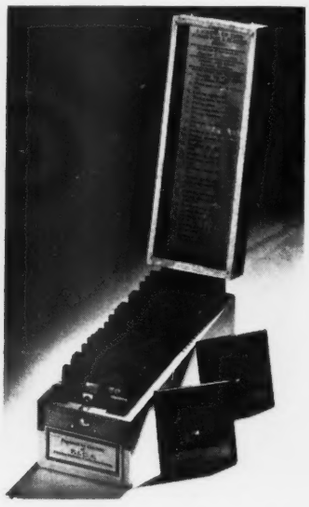
The speaker stated the Island Makeup Cabinets require slightly more floor space area but they do offer possibilities for a considerable saving in steps.

MMM Enlarges Branch

The Minnesota Mining & Mfg. Co. has announced the purchase of 26,000 sq. ft. of additional office and warehouse space in Detroit. Two buildings and nearly 4 A. of land are included in the property. Address of the new branch sales offices and warehouse facilities is 8825 Grinnell Ave., Detroit, Mich.

Visual Education

High school printing teacher Adrian P. Pollock of Ferndale, Mich. has satisfied a desire to earn his Masters Degree in Education by producing a series of 25 color slides on *Locking Up Type Forms for the Platen Press*. This project, along with a 23 page essay, earned Mr. Pollock's degree for him from the College of Education of Wayne University in Detroit.



A complete set of full-color slides on *Locking Up Type Forms for the Platen Press* prepared by Adrian P. Pollock. The title of each slide is listed on the inside top cover of the carrying box.

When the Program Chairman, Harry Rendell, of the Printing Industry Crafts Association of Southern Oakland County, Mich., scheduled the slide film series by Mr. Pollock for a program showing, the PICA Club's 60 shop owner-members were so impressed that they offered to have duplicate sets of slides made for presentation to local high school printing classes.

The 25 slides consist of one title slide and a breakdown of the actual steps in locking up a form, each being presented in its simplest form. In the preparation of the slides, Mr. Pollock made black and white prints for experimental purposes; then, with all corrections in, used a Kodak Bantam with F/4.5 lens to produce the 24 colorful, instructional slides. The original set of Kodachrome slides were presented to Dr. G. Harold Silvices at Wayne University as partial fulfillment of the Master of Education Degree.

Additional information about Mr. Pollock's slides can be secured direct from him, as well as complete full-color sets of the present film on Lockup. Write Adrian Pollock, 273 E. Troy, Ferndale, Mich.

Installs Paper Machine

A paper machine designed to produce machine coated stock at speeds up to 1200 f.p.m., has been installed at the Pasendena Tex. mill of The Champion Paper and Fibre Co. It is stated that a sheet of machine coated paper trimming 135 in. will be made on the machine.

A Decision That Creates

More Sales

The demand for more pictures is the sign of an astute advertising manager. Pictures tell far more than words alone. Pictures tell a story that appeals to anyone with money to spend.

Catalogs and folders, instruction books, textbooks, as well as magazines and books that are designed for entertainment alone, all have provable, added value when words are brought to life through illustrations.

Good reproductions of illustrations make any printed material more attractive, more effective. And the Graphic Arts industry finds the high quality of Kodak photomechanical supplies a big help in the making of consistently good printing plates.

EASTMAN KODAK COMPANY
GRAPHIC ARTS DIVISION
ROCHESTER 4, N. Y.

Kodak
TRADE-MARK

Conference Dates *(with organization names and principal officers)*

American Photoengravers Association — 1950 Convention to be held at Chalfonte-Haddon Hall Hotels, Atlantic City, N. J., October 9, 10 and 11. W. K. James, President; Frank J. Schreiber, Executive Secretary, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1950 Conference to be held at Hotel Statler, Buffalo, N. Y., June 12, 13, and 14. Chairman of the Committee, Edwin H. Evers, Production Manager, St. Louis *Globe-Democrat*. Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference—1950 Conference to be held at Commodore Perry Hotel, Toledo, Ohio, June 16 and 17. District Representative, Alvin F. Friedrich, 730 E. Washington Blvd., Indianapolis, Ind.; Deputy District Representative, John Morehouse, c/o Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O.; John E. Frisbie, The Blade Printing & Paper Co., Monotype Dept., Toledo, Ohio; Secretary-Treasurer, John Fisher, Superintendent, Reardon-Parshall Co., 466 Larned St., N.W., Detroit, Mich.

Great Lakes Newspaper Mechanical Conference—1951 Conference to be held in South Bend, Ind., January 7, 8 and 9. President, LeRoy Coates, Pressroom Supt., Grand Rapids (Mich.) *Press;* Secretary, Al. P. Oberg, Flint (Mich.) *Journal;* Chairman, Mfrs. and Suppliers Committee, Clay Wellman, Ludlow Typograph Co., 2032 Clybourn Ave., Chicago 14, Ill.

Illinois Newspaper Mechanical Conference — President Arthur Kramer, Joliet (Ill.) *Herald-News;* Secretary-Treasurer, William L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers — 1950 convention to be held aboard the ship Queen of Bermuda and the closing session ashore at the Princess Hotel, Bermuda. Ship departs from New York, N. Y., Saturday, October 28, 3 p.m. Return trip, boat docks in Bermuda on Friday, November 3 at 9 a.m. A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, Ohio.

International Association of Printing House Craftsmen—1950 Convention to be held at Hotel Stevens, Chicago, September 10, 11, 12 and 13. President, Russell J. Hogan, Wilson H. Lee Co., Orange, Conn.; Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Typographic Composition Association—1950 convention, Chicago, Sherman Hotel, Sept. 14, 15 and 16. President, Frederick H. Lutz, Lutz Composition, 93 Centre St., Brockton 35, Mass.; Frank M. Sherman, Executive Director, 1015 Chestnut St., Philadelphia 7, Pa.

Iowa Daily Newspaper Mechanical Conference — 1950 meeting in Ottumwa, Ia. President, Howard (Red) Lee, Composing Room Supt., Ottumwa (Ia.) *Courier;* Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton, (Ia.) *Herald*.

Kansas Newspaper Mechanical Conference — 1950 Conference to be held at Kansan Hotel, Topeka, Kan., September 30 and October 1. President, G. M. Harris, Salina (Kan.) *Journal;* Secretary-Treasurer, Larry Miller, 701 Jackson St., Topeka, Kan.

Lithographers National Association — 1950 Convention to be held at Edgewater Beach Hotel, Chicago, September 7, 8 and 9. President, Randolph T. Ode, President, The Providence Lithograph Co., Providence, R. I.; Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

National Association of Litho Clubs — 1950 convention to be held at Copley Plaza Hotel, Boston, April 14 and 15. Executive Secretary, William J. O'Holleran, Assistant Supt., Myercord Co., 5339 W. Lake St., Chicago 44, Ill.

National Association of Photo-Lithographers — 1950 Convention to be held at The Shoreham, Washington, D. C., October 25, 26, 27 and 28. Executive Vice President, Walter E. Soderstrom, 317 West 45th St., New York 19, N. Y.; Executive Secretary, William J. Stevens, 317 West 45th St., New York 19, N. Y.

National Graphic Arts Education Association — 1950 convention, Chicago, Sherman Hotel, Sept. 21, 22 and 23. John G. Henderson, President; Fred J. Hartman, Educational Director, 719 Fifteenth St., N. W., Washington 5, D. C.

National Graphic Arts Exposition — International Amphitheatre, Chicago, September 11 to September 23, 1950. Headquarters for National Graphic Arts Exposition, Inc., at Room 802, 105 W. Monroe St., Chicago. President, A. E. Giegengack; Asst. to President, Russell H. Herrell; Secretary, S. Frank Beatty, Graphic Arts Assoc. of Illinois, Chicago. Exposition hall closed on Sunday, Sept. 17. Open all other days from 1 p.m. to 10 p.m.

National Printing Equipment Association, Inc. — Palmer House, Chicago. Directors meeting, 8 p.m., Sept. 18; Members meeting, 10:30 a.m., Sept. 19. President, R. Verne Mitchell, Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O.; James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — 1950 Conference to be held at Hotel Statler, Boston, October 28 and 29. President, Arthur M. Kohler, Production Mgr., Waltham (Mass.) *News-Tribune;* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day*.

Northwest Mechanical Conference — President, Joseph J. Cory, Chief Composing Room Machinist, St. Paul (Minn.) *Dispatch* and *Pioneer Press*. Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference —1950 Conference to be held at Fairmount Hotel, San Francisco, May 6, 7 and 8. President, Fred Gross, Mechanical Supt., San Francisco *Chronicle;* Vice President for the Pacific Northwest, Harry Hale, Production Mgr., Portland (Ore.) *Oregonian;* Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle;* Secretary for the South, Fred J. Moyer, Los Angeles *Daily News*.

Pacific Society of Printing House Craftsmen—Multnomah Hotel, Portland, Ore., July 21-22. Rudolph Ernst, President, 3664 S. E. Center St., Portland 2, Ore.; Secy.-Treas., C. B. Park, 102 N. W. 9th Ave., Portland, Ore.

PNPA-NJPA Joint Mechanical Conference —1950 Conference to be held at Hotel Claridge, Atlantic City, N. J., April 14 and 15. Conference director, Theodore A. Serrill, PNPA Manager, Telegraph Bldg., Harrisburg, Pa.

Printing Industry of America — 1950 convention, Chicago, Palmer House, Sept. 17, 18, 19 and 20. James R. Brackett, General Manager, 719 Fifteenth St. N. W., Washington, D. C.

Research and Engineering Council — Next semi-annual meeting to be held in Chicago (hotel to be announced later), Thursday, June 22, to be followed by trip to Institute of Paper Chemistry, where session will be held in Appleton, Wis., on Friday, June 23. Chairman, Frank F. Pfeiffer, Reynolds & Reynolds Co., 800 Germantown Ave., Dayton, O.; Secretary, Bernard Taymans, 719 Fifteenth St., N.W., Washington 5, D. C.

SNPA (Eastern Div.) Mechanical Conference— Chairman, L. H. Pickens, Mechanical Supt., Greenville (S. C.) *News-Piedmont;* Secretary, Tom Tanner, c/o SNPA, P.O. Box 1569, Chattanooga 1, Tenn.

SNPA (Western Div.) Mechanical Conference—Secretary, C. W. Tabb, 621 Texas Bank Bldg., Dallas, Tex.; Chairman, Manufacturers' and Suppliers' Committee, William Sefton, c/o Howard Flint Ink Co., 1010 Lockwood Dr., Houston 20, Tex.

Technical Association of the Lithographic Industry — (TALI)—1950 meeting to be held April 24 and 25 in Rochester, N. Y. President, Michael H. Bruno, Lithographic Technical Foundation, Glessner House, 1800 So. Prairie Ave., Chicago 16, Ill. Secretary-Treasurer, Geo. W. Wilhelm, 814 N. East Ave., Oak Park, Ill.

Fig. 1

Work Simplification Notes

IN THE Louisville (Ky.) *Courier-Journal* and *Times*, Composing Room Superintendent C. Frank Mann recently adopted a detail which carries along with it the elements of work simplification. On one end of each ad stand base storage cabinet he has provided the following: A Rouse lead and slug cutter, a file, scissors, and two reels of tape. (See Fig. 1.) Just above the above-named assembly on each of the cabinets a small chart, 50 picas wide by 29 picas deep, has been posted. (See Fig. 2.)

The chart reproduced in Fig. 2 in reduced size, contains information respecting the setting depth of advertisements to allow for stereotype mat shrinkage so the advertisements will be of proper depth when printed in the paper. Also contained in the chart is a specimen of all borders together with the numbers which have been assigned to them. At the right side of the chart is the type code used by the markup men in marking copy for the machine compositors and ad alley men.

Aside from the fact that he has available to him at all times essential information, to which he can refer, the assembly together with the chart make the ad man's work more convenient, better work is produced, and the chart is valuable to new ad alley workers who may not be familiar with the requirements in the composing room, particularly the specifications for the depth of advertisements to compensate for stereotype mat shrinkage.

In so many instances, it's the little things that count. The chart and tool assembly is a prime example.

Fig. 2

The Rouse lead and slug cutter, file, scissors and two sizes of tape are provided on each stand to make the ad man's job easier. Please return them to holders after use.

Adman must put his name on all ads and store proofs he handles. THIS IS A "MUST."

Correct ad lineage, as ordered, is important — this scale is furnished for your convenience — (shrinkage has been allowed).

Agate Lines	Picas	Agate Lines	Picas	Agate Lines	Picas	Agate Lines	Picas
14	6	48	21	80	35	114	50
16	6.10	50	22	82	35.10	116	50.10
18	7.8	52	22.10	84	36.8	118	51.8
20	8.8	54	23.8	86	37.6	120	52.6
22	9.6	56	24.6	88	38.6	122	53.4
24	10.6	58	25.4	90	39.4	124	54.6
26	11.4	60	26.3	92	40.3	126	55.4
28	12.3	62	27.2	94	41	128	56.3
30	13.2	64	28	96	42	130	57.2
32	14	66	28.10	98	43	132	58
34	14.10	68	29.8	100	44	134	58.10
36	15.8	70	30.6	102	44.10	136	59.8
38	16.6	72	31.4	104	45.8	138	60.6
40	17.6	74	32.3	106	46.6	140	61.4
42	18.4	76	33.2	108	47.4	270	118.6
44	19.3	78	34	110	48.3	FULL PAGE	
46	20.2			112	49	DEPTH, 131	

For odd number of agate lines — 15, 17, 19, etc. — add 5 points to measure given for even numbers. In ads ordered over 140 lines add number wanted to 100. For example: 44 and 21 equal 65 picas for 148 lines. Don't add 74 and 74 for 148.

WIDTH OF COLUMNS

1 Col. —12	3 Cols.—36.8	5 Cols.—61.4	7 Cols.— 86
2 Cols.—24.4	4 Cols—49	6 Cols.—73.8	8 Cols.— 98.4

BORDERS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

TYPE CODE

LIGHT FACE

A—Spartan
8 to 36-pt. Lino
42 to 72-pt. Lud

B—Bodoni
10 to 30-pt. Lino
36, 42-pt. Lud

C—Caslon
12 to 30-pt. Lino
36 to 72-pt. Lud

D—Excelsior
5½, 7½, 10-pt. only

BOLD FACE

E—Bodoni
8 to 30-pt. Lino
36 to 72-pt. Lud

F—Ultra Bodoni
8 to 24-pt. Lino
30 to 72-pt. Lud

H—Spartan
8 to 36-pt. Lino
42 to 72-pt. Lud

J—Mandate
18, 24, 30, 36, 48, 60, 72-pt. Lud

K—Campanile
18 to 36-pt. Lino
42 to 84-pt. Lud

L—Heavy Metro
10 to 36-pt. Lino
42 to 72-pt. Lud

M—Caslon
18, 24, 30-pt. Lino
36 to 72-pt. Lud

N—Cond. Caslon
14 to 30-pt. Lino

O—Condensed Spartan
10 to 36-pt. Lino
42 to 96-pt. Lud

P—Condensed Gothic
10 to 36-pt. Lino
42 to 72-pt. Lud

R—Excelsior
5½, 7½, 10-pt. only

Old Eng.—Old English
18, 24, 36-pt. Lud

ITALIC

S—Caslon Light
12, 14-pt. Lino
60, 72-pt. Lud

T—Bodoni Light
10 to 30-pt. Lino
36, 42, 48-pt. Lud

U—Excelsior
8 and 10-pt. only

V—Spartan Medium
10, 12-pt. Lino
18 to 48-pt. Lud

W—Bodoni Bold
8 to 30-pt. Lino
36 to 72-pt. Lud

X—Ultra Bodoni
8 to 24-pt. Lino
30 to 48-pt. Lud

Y—Heavy Spartan
10 to 36-pt. Lino

Z—Condensed Spartan
10 to 36-pt. Lino

Give proofreaders a break by proofing full page ads in sections. Don't waste strip material. The piece you don't use can be cut into shorter pieces and placed in slug racks.

Patents

For The GRAPHIC ARTS

Covering patents issued February 7, February 14, February 21 and February 28.

Binding, Cutting, Perforation

During the four weeks covered by this report, no patents have been issued for this heading.

Composing Room Equipment

During the four weeks covered by this report, no patents have been issued for this heading.

Feeding, Folding, Delivery

2,496,977. THE REWIND DRIVE MECHANISM permits the winding of large rolls on small cores and automatically provides for velocity control of the rewind shaft to compensate for increasing roll diameter as the roll is wound. The invention employs a slip clutch and a variable speed device. The clutch is on the input side of the device and is so arranged that the conditions of slippage and speed are held constant through the ful range of diameters from core size to full roll size. Web tension is substantially constant and it is not necessary to contact the web or printed side of the web with a guide roller as in some previous rewind drives. Invented by Rudolph P. Bechle, Yonkers, N. Y. Assigned to Potdevin Machine Co., Brooklyn, N. Y. Application January 10, 1947. 7 claims.

2,497,849. SHEET FEEDER FOR HIGH-SPEED LITHOGRAPHIC PRESSES is of the type in which a sheet picker moves through an open part of conveyor, into and out of the space enclosed by the conveyor and lifts up the trailing edge of top sheet of stack and holds edge above conveyor until a closed part of same enters between top sheet and other sheets and releases top sheet to travel on conveyor. This patent provides for adjusting the position of the picker mechanism so that it may be used with sheets of various sizes. The adjusting mechanism consists of a chain movable with the paper conveyor and a sprocket in constant mesh with the chain and shiftable with the picker. This chain may be one of the chains which supports and drives the conveyor. Invented by Roy Aberle, Portland, Me. Assigned to Southworth Machine Co., Portland, Me. Application April 25, 1945. 19 claims.

2,499,068. RECIPROCATING TRANSFER FOR ROTARY SHEET FEEDING MECHANISMS. A sheet feeding mechanism is provided which may be adjusted to feed freshly printed sheets of various widths and various lengths accurately to the same place adjoining a drum in synchronism with the rotation of the drum. Mechanism is designed to cooperate with sheets delivered to a feed table by a conveyor mechanism, without requiring that the sheets be first placed in a definite position. Mechanism is synchronized with a rotating drum provided with sheet gripping members on the drum and means for feeding the sheets accurately to a limited area in which they may be gripped by the grippers. Invented by Wendell William Jones, Pittsburgh, Pa. Assigned to Blaw-Knox Co., Pittsburgh, Pa. Application May 28, 1947. 3 claims.

2,499,125. FRONT EDGE DETECTOR MECHANISM is provided for use in a stream-feeder type of sheet feeding apparatus in which sheets of paper are removed in succession from a pile and fed onto a layboard where, by means of lays or the equivalent, registration of the partly overlapping sheets is effected before they are transferred to a printing or other machine. Invention comprises a feeler movably supported in the path of the sheets near the front lays for movement by each sheet and sensing mechanism operated in timed relation with sheet feeding mechanism for determining whether or not the feeler has been moved by a correctly placed sheet. If feeler has not

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

EBCO

22" x 34" OFFSET PRESS

most for your..... Offset money

You could pay *10 times as much* to get the features that EBCO gives you — for the first time in a 22" x 34" offset press! Improvements in offset press design that mean easier accessibility, more positive controls, speedier operation — more profit per pile!

If you are thinking of expanding, look into EBCO *first!* Write for the illustrated folder describing all the exclusive features of the EBCO press!

- ★ Patented Pull Side Guide
- ★ Larger, Sturdier Dampening Rollers
- ★ Cylinders Balanced and Running on Tapered Roller Bearings
- ★ Rapid Accurate Plate Cylinder Adjustment
- ★ Positive Register Detectors on Each Front Guide
- ★ New One-piece Feeding Cylinder
- ★ Full Sight Larger Diameter Inking Rollers
- ★ Inker Driven from Main Drive
- ★ Proper Blanket Tension Easily Applied
- ★ Positive Sheet-by-sheet Reloading Feeder (Motor Driven Pile Lift Optional)
- ★ Extra Capacity Clear View Delivery
- ★ Streamlined for Safety and Ready Accessibility
- ★ Graduated Scales for Feeder Pile and Side Guide

EBCO

PRINTING MACHINERY DIVISION · ELECTRIC BOAT COMPANY

445 PARK AVENUE, NEW YORK 22, NEW YORK
120 So. LA SALLE STREET, CHICAGO 3, ILLINOIS
RUSS BUILDING, SAN FRANCISCO, CALIFORNIA

been moved, sensing mechanism causes stoppage of feeding of sheets and/or the operation of a warning device. Invented by Headley Townsend Backhouse, Wentworth, England. Unassigned. Application August 10, 1948; in Great Britain August 5, 1947. 4 claims.

Miscellaneous

2,497,118. APPARATUS FOR LIFTING CYLINDRICAL OBJECTS. Apparatus is capable of handling large, heavy rolls of paper used in newspaper plants. It includes a tiltable frame having a pair of fixed inner oppositely arranged concave jaws. Each of a pair of movable outer concave jaws is opposite a fixed jaw. Tiltable frame is mounted on a supporting frame for swinging movement about a horizontal axis. Movements of jaws and frame are effected hydraulically. Invented by John J. Ferrario and Joseph Dondero, San Francisco, Calif. Unassigned. Application May 20, 1947. 9 claims.

2,498,486. MEANS FOR SECURING PAPER ROLLS TO ROLL SHAFTS. The chuck or dog disclosed is for rigidly fixing a roll onto such roll shafts as are used in the printing and lithographic arts for supporting heavy paper rolls. The chuck has a tubular split arbor with a plurality of peripheral lugs fixed to the other end of the arbor. They are adapted to be readily adjusted and to expand radially to press against the roll core. Means are provided for securing the arbor to a shaft extending through the core of the roll so that the chuck and shaft will be fixed as a unit to rotate as such, when the paper roll is being unwound under tension during printing or lithographic operation. Invented by Michael De Marinis, Bronx, N. Y. Unassigned. Application March 28, 1946. 11 claims.

Plate Making

2,496,814. A PLATE BURNER FOR PHOTOENGRAVING is provided for receiving a photoengraving plate such as a halftone or line engraving. A carrier is movable into and out of a casing, and while within the casing it is subjected to relatively intense heat so as to burn-in the exposed and developed photosensitive resist, usually bichromated gelatin, or to melt the etching powder that has been applied to the partially etched plate, this etching powder usually being dragon's blood or some equivalent resin. Gas-burners are a preferred source of heat and plate is constantly moved to insure uniform heating. Invented by Frank T. Powers, Glen Cove, N. Y.; Frank T. Powers, Jr., and John M. Powers, executors of said Frank T. Powers, deceased. Assigned to Powers Photo Engraving Co., New York, N. Y. Application September 30, 1947. 3 claims.

2,497,991. PHOTOGRAPHIS CYLINDRICAL COMPOSING APPARATUS HAVING AUXILIARY SUPPORTS. Separate images on a film negative may be placed in contact with a sensitized printing cylinder wherever the lay-out of the form requires them to be placed. This is accomplished by using a cylinder supporting mechanism adapted for use with film supporting and exposure devices, which will accommodate a standard length of printing cylinder and to which is added a pair of auxiliary cylinders near the ends of the main cylinder. This provides a continuation of the cylindrical surface for film overlap. It is also possible to use similar auxiliary cylinders with a dummy cylinder accommodating flexible, sensitized printing plates, such as those used for offset or gravure printing. In the latter construction provision is made for differing diameters of auxiliary cylinders and dummy cylinder so that a smooth continuous film supporting surface is presented which will not deleteriously affect the photographic negative in overlapping contact with the cylinder surface during photographic exposure. Invented by William C. Huebner, New York, N. Y. Unassigned. Application May 2, 1947. 5 claims.

2,499,100. METHOD FOR OBTAINING COLOR REGISTRY IN OFFSET PRINTING. A dowel and hole arrangement is provided whereby printing plates for producing multicolor copy with exact hairline color registry may be produced. A plurality of negatives corresponding to the several colors are successively positioned on a transparent strip or negative holder, and the strip is positioned in identical position on a succession of plates for exposure. Arrangement is such that positioning in horizontal or transverse direction is obtained by the dowel and hole registration means and vertical positioning is obtained by the means for positioning the strip on the plates. Invented by Harry C. Kessler, jr., Drexel Hill, Pa. Unassigned. Application October 19, 1946. 1 claim.

They've got to be...

RUGGED!

--so do good rollers

A wrestler has to be able to take it. So do good printers' rollers. They've got to be rugged . . . and they are when they're AMERICAN'S! We pre-condition these rollers for the job they'll have to do. They've got what it takes because factory skill and "know how" gave it to them . . . scientifically built it into them here in one of America's finest roller plants. Order AMERICAN Summer Composition ROLLERS now, and see how they stand the punishment of summer schedules. Order today.

AMERICAN

ALL-SYNTHETIC RUBBER ROLLERS
COMPOSITION ROLLERS - PADDING GLUE
LITHOGRAPH ROLLERS - MAKE READY PASTE
LONG LYF ROLLER DRESSING

ROLLERS

AMERICAN ROLLER COMPANY
1342 NORTH HALSTED ST. - CHICAGO 22, ILL.
225 N. NEW JERSEY ST. INDIANAPOLIS 4, IND.

Printing Inks

2,498,812. A BROWN INK FOR INTAGLIO PRINTING is prepared by dissolving 5 parts of the dyestuff of this invention in a mixture of 350 parts of benzene and 400 parts of toluene, and dissolving 250 parts of dammar resin in the resulting solution with the aid of heat, while stirring. Instead of dammar resin, any desired natural or artificial resin soluble in hydrocarbons may be used. The dyestuff is the monoazo-dyestuff obtained by coupling diazotized 2:5-dichloroaniline with 1-aminonaphthalene to produce brown colorings. Invented by Lucien Lambelet and Wolfgang Jaeck, Basel Switzerland. Assigned to Ciba, Ltd., Basel, Switzerland. Application October 14, 1946; in Switzerland November 16, 1945. 2 claims.

2,499,004. INKS AND VEHICLES THEREFOR. A vehicle for a "heat-set" printing ink is provided which admits of multi or single color printing in a single pass through the press without danger of smudging, sticking or picking. Following application of heat, as for instance, from one or more gas burners at the delivery end of the press, ink permits delivery of the imprinted sheets at all speeds of which the press is capable up to about 5000 multi-color printed sheets per hour. There are no highly inflammable ingredients and ink will not dry or cake on the press. The vehicle is a resin made from a mixture of a saturated dibasic acid, polyhydric alcohol and higher fatty acid. The mix is partially polymerized and not readily flowable at room temperatures. It is thinned for use and either pigments or dyes may be used. Invented by Harvey A. Seil, Rutherford, N. J., and Herbert Cole, New York, N. Y. Assigned to Herbert Cole, New York, N. Y. Application July 30, 1946; in Canada January 2, 1942. 7 claims.

IN 35 SECONDS a Rouse Band Saw cuts a full galley of slugs **to variable measure**—automatically, accurately. No gauge setting is required—no clamping—no measuring! Slugs feed mechanically **at uniform speed.**

Teamed up with a type-setting machine, a Rouse Band Saw does the work of hours in minutes. It cuts sluglines for all types of composition that require frequent changes of line measure.

MITERING MACHINES
COMPOSING STICKS
SLUG CLIPPERS
BAND SAWS
LEAD AND RULE
CUTTERS
TYPE GAUGES

Write today for illustrated folder on this and other Rouse time-saving printers' equipment.

H. B. ROUSE & COMPANY
2214 North Wayne Avenue
Chicago 14, Illinois

For greater accuracy—specify Rouse Composing Sticks. An investment in Rouse equipment pays a handsome profit.

"50 Years of Service to the Printing Industry"

Printing Presses and Equipment

2,497,520. DOCTOR BLADE for use in rotary intaglio printing machines may be "laid" back on to the printing cylinder after an inspection of the printing surface with minimum chances of smearing. Even in the extreme cases where the doctor blade has a steep angle, and is close to the impression zone, it may be replaced without damaging printing surface. This is accomplished by supporting the blade on a carrier with an extension. Pivotally supported arms support the carrier on a base and another set of arms pivotally support the base and pivotally connect to the extension. The latter arms may be swung to move the carrier and the blade bodily toward and from the cylinder in a major movement. Means are also provided to move the extension relative to said last mentioned arms to rock the carrier and thereby move the blade toward and from the cylinder in a minor movement. Invented by Norman Peter Toft, London, England. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application October 23, 1946; in Great Britain November 2, 1945. 7 claims.

2,497,648. INK DELIVERY REGULATING DEVICE for printing press ink fountains makes possible the adjustment, either individually, or simultaneously in selected groupings, of a presswide series of columnar ink delivery regulating devices, which may be located some distance from the fountain, as, for example, in a convenient waist-high position at one side of the press. In an ink fountain having a revolving fountain roller and a laterally flexible blade extending along the same for regulation of the ink film thickness on said roller in accordance with lateral flexure of the blade, this invention provides a support extending lengthwise of the blade and having a series of adjusting screws threaded therein to bear against the face of the blade for lateral flexure of the blade in accordance with the endwise displacement of the screws. A positive stop coacts with each screw for limiting its rotation to a fixed angular distance correlated with the permissible range of flexure of the blade with reference to the roller. A drive shaft includes individual slip type drive connections for each screw. Invented by Emory W. Worthington, Chicago, Ill. Assigned to Goss Printing Press Co., Chicago, Ill. Application September 16, 1944. 13 claims.

2,497,798 through 2,497,801. PRINTING PRESS HAVING CURVED IMPRESSION SURFACE. This series of inventions pertains to platen or job type printing presses wherein the platen is provided with a convex curved surface so that cylinder press printing is simulated on a platen press. The pivotal points of the pivotal member (either

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D.C.

the platen or the type bed) and the pivoted frame are so located with respect to each other and to the non-pivoted member that the actual path traveled by the ends of the pivoted member results in perfect pin-point contact. Various aspects of these inventions are covered in the companion patents. Invented by Charles F. Root, Cleveland, O. Assigned to Chandler & Price Co., Cleveland, O. Applications July 26, 1946; August 2, 1946; March 12, 1947 and April 23, 1947, respectively. 8, 9, 6 and 5 claims, respectively.

2,497,909. REGISTER REGULATOR FOR PRINTING PRESSES. This control is for securing an accurate register between four differently colored prints with the aid of photoelectrically controlled devices that require a lesser number of photoelectric scanners and associated electronic circuits than usually necessary in such control systems. There is a master scanner for issuing master impulses in response to passage of register marks to a number of reference scanners which are located ahead of the imprints for issuing reference impulses in response to the passage of register marks. Electronic mixer units are connected to the master scanner and to one of the reference scanners to be controlled by the master impulses and the reference impulses. Two output circuits are connected to the respective control circuits. Such circuits are so connected to master impulses and motor control units that one control unit is caused to run so as to effect simultaneity of the impulses. Invented by Lloyd C. Poole, Lakewood, O. Assigned to Westinghouse Electric Corp., East Pittsburgh, Pa. Application December 10, 1946. 13 claims.

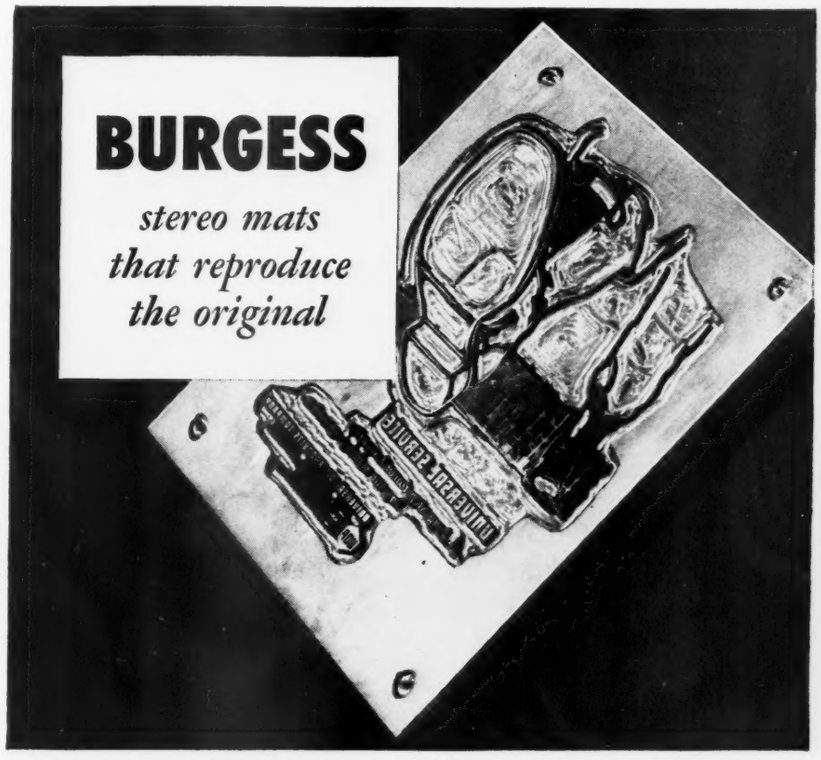
EXECUTIVE Qs

E. B. Davis, Vice President of Ideal Roller & Mfg. Co., Inc., has announced the addition of Raymond C. McDonough and Jack West, jr., to the Chicago sales staff. Mr. McDonough was with the Navy during World War II. Mr. West, also a veteran, is a graduate of the University of Illinois. Both men will cover the Chicago territory.

Herbert F. Dixon, for almost 40 years a sales representative with the Harris-Seybold Co., was recently honored at a retirement party in Philadelphia by friends and associates. He retired last year at the age of 70. Dixon was born in Margate, England. He and wife, Gertrude, live at 7361 Rural Lane, Philadelphia.

Glenn C. Compton, printing industry specialist with Robbins, Barber & Baar, New York, public relations counsel, has been appointed Director of Public Relations of Printing Industry of America, Inc., according to an announcement by Allerton H. Jeffries, President of the association. Mr. Compton, a member of the Research and Engineering Council of the Graphic Arts, International Assoc. of Printing House Craftsmen and other organizations, has joined the headquarters staff of the association in Washington which is headed by James R. Brackett, PIA General Manager.

Murray A. Beckford, formerly general manager of Sleight Metallic Ink Co., recently joined the sales staff of International Printing Ink Div. of Interchemical Corp. He will serve in a special sales capacity, working out of the New York branch office under W. F. Cornell, Eastern District Manager. He is a graduate of Franklin and Marshall College and started his career in 1933 with Frederick H. Levey Co. He served as branch manager of the Levey organization and later as Chicago sales manager, western sales manager and sales and advertising manager.



Good quality line reproduction depends upon a number of things... the ability of the stereo mat to make a faithful mold of the pattern and to deliver a clean, sharp casting, for example.

Burgess mats have proved their superiority in hundreds of stereo shops and newspaper plants with a new high in quality... with results that reproduce faithfully the original whether it be line or halftone work. This same high quality is available to you whenever you specify Burgess mats.

BURGESS CELLULOSE COMPANY
Manufacturers and Distributors of
Burgess Chrome and Tone-Tex Mats
FREEPORT, ILLINOIS

A Laboratory Product
BURGESS
Chrome
MATS

Louis Pleninger, Vice President in Charge of Foreign Sales, American Type Founders, is on an extended trip through Europe, visiting ATF's sales agencies and customers. His itinerary includes England, the Netherlands, France, Belgium, Italy, Switzerland, Germany, Norway, Sweden and Denmark.

Robert S. Bates, President of the Pennsylvania Newspaper Publishers' Assoc., announced appointment of Theodore A. Serrill as General Manager. Mr. Serrill joined the PNPA in 1944 as associate manager. He succeeds William N. Hardy, manager of the Association for the past 21 years, who died recently at Harrisburg, Pa. A graduate of Pennsylvania State College, Serrill has been associated with the Washington (D.C.) *News*, Charlotte (N.C.) *News* and Easton (Pa.) *Daily Express*. Before joining the PNPA, he directed public relations for the U. S. Treasury war loan drives in the Third Federal Reserve District and Pennsylvania. He is married and has two sons.

Theodore A. Serrill, named General Manager of the Pennsylvania Newspaper Publishers' Association.

Several announcements were made recently affecting personnel of the Harris-Seybold Co. Appointment of John M. Morehouse as Central District Manager was announced by Ren R. Perry, General Sales Manager. Mr. Morehouse succeeds the late A. T. Walker. He will be responsible for sales in Ohio, Kentucky, West Virginia, Michigan, and parts of Pennsylvania and Indiana. He will make his headquarters at the company's general offices in Cleveland. Mr. Perry also announced the appointment of T. M. Broadston as New York Metropolitan Sales Manager. The promotion gives Broadston administrative supervision of all Harris-Seybold sales representatives in metropolitan New York. Jack C. Dabney, Eastern District Manager, and Roy P. Tyler, Manager of Service and Installation, revealed appointment of Herman J. Schart as Eastern District Service Manager. E. Terry Gaylord, former service manager, has been promoted to the Eastern District sales staff.

T. M. Broadston, Harris-Seybold's New York Metropolitan Sales Manager.

John M. Morehouse, appointed Central District Manager for Harris-Seybold Co.

Dean S. Bowman, Design Engineer for the Lanston Monotype Machine Co., died on February 24 in Graduate Hospital in Philadelphia after a short illness. Mr. Bowman started his career with the Wales Adding Machine Co., Wilkes-

Edes Zinc

OUTSTANDING IN EVERY DEPARTMENT

REPORT CARD

Gauge Accuracy A+
Perfect Pumicing A+
Enamel Uniformity A+
Clean Sharp Etching A+
Easier Routing and Finishing A+
Less Makeready A+

TEACHERS: PHOTOGRAPHER, PRINTERS, ETCHERS, ROUTERS, FINISHERS, CUSTOMERS

If you're not getting report cards like these on your photo-engraving zinc . . . better call your Edes dealer right away!

EVERY YEAR IT'S BETTER INVESTIGATE

EDES

PHOTO-ENGRAVING METALS

EDES ENGRAVING METALS
Regular Zinc
Hard Matrix Zinc
Triplemetal
Copper
Brass
Gravure Sheets

THE EDES MANUFACTURING COMPANY, Plymouth, Mass., U.S.A.

Represented by: R. P. BICKFORD, Room 2118, 420 Lexington Ave., New York 17, N. Y. * GEORGE R. KELLER, 210 G St., N. W. Washington, D. C. * W. OLIVER TRIPP COMPANY, 222 Columbus Ave., Boston, Mass. * C. G. DOM SUPPLY COMPANY, 125 East Pearl St., Cincinnati, Ohio * MID-WEST PHOTO ENGRAVERS SUPPLY COMPANY, 520 Clark Ave., St. Louis, Missouri * E. H. WALKER SUPPLY COMPANY, 140 Que St., N. E. Washington, D. C. * 614 East Main St., Richmond, Va. * TEANECK CHEMICAL COMPANY, INC. Teaneck, N. J. * C. G. AMENTA, 5842 North Leonard Ave., Chicago 30, Ill. * ALLAN B. CROKE COMPANY, 451 Atlantic Ave., Boston, Mass. * C. S. ILLINGWORTH, 47 Dakota Ave., Buffalo, N. Y. * J. W. FEINSTEIN, Distributor, 883 Mission St., San Francisco, Cal. * THOMPSON-HAYWARD CHEMICAL COMPANY, 29th & Southwest Blvd., Kansas City, Missouri * G. H. WILEY COMPANY, 507 East Third St., Dayton, Ohio * MARVIS DIST. COMPANY, 144 Walker St., S. W. Atlanta 3, Ga. * SCIENTIFIC SUPPLY COMPANY of TEXAS, 1116 Hemphill St., Houston 13, Texas.

Barre, Pa., in 1906 and in 1918 he joined the Barrett Adding Machine Co. in Philadelphia. He became associated with the Lanston organization in 1921. Surviving are his widow, Mrs. Cora M. Bowman; one son, Clive, and his wife and two children; and three brothers.

Robert W. Shaw, elected Assistant Vice President of Tingue, Brown & Co. at a recent meeting of the Board of Directors, Mr. Shaw has been associated with the company since 1937, except for a 3½ year period when he served with the Air Force during World War II.

The appointment of Fred J. Bieber as Assistant General Manager was recently announced by David W. Schulkind, President of the E. P. Lawson Co. Mr. Bieber is a graduate of Rochester Institute of Technology. He has been associated with Bausch and Lomb Optical Co., Trussell Mfg. Co., V. & O. Press Co., Scovill Mfg. Co., Remington Rand, Inc., and Casco Products Co.

Alfred Levine, recently appointed Vice President of Consolidated PhotoEngravers & Lithographers Equipment Co.

At a recent meeting of the Board of Directors of Interchemical Corporation, R. W. Smith was elected a Director of the Corporation, under a plan for the rotational representation of heads of operating units on the Board. Mr. Smith is Divisional President of the International Printing Ink Div. In 1931 he was appointed Chicago branch manager, and later elected a vice president of IPI and appointed western district manager. He is a graduate of the University of Vermont.

New Era's Anniversary

(Continued from Page 44)

Heat Seal Labels

One of the latest developments on the New Era press is a device for production of heat seal labels used by the baking industry and packaging trade. The company states this machine is able to print in any number of colors, die-out various shapes, and rewind the labels in one operation. In 1934 standard New Era presses were developed to print on silk and cotton.

It was at the turn of the twenties that the New Era Manufacturing Co. was formed to take over the manufacture of multi-process presses from the Regina Company of Rahway, N. J., and a plant was located on Straight St., Paterson, N. J.

In 1928, New Era moved to its present location at 375 Eleventh Ave., Paterson, and, in 1940, Horace C. Lockwood, who now heads the company, assumed managerial control. Two new divisions were added to the company: Lockwood's, Inc., in 1941, for manufacturing the Superior Press for small runs on labels, tickets, etc., and the Graeber Stringing and Wiring Machine Co., in 1944, for

Don't Let Deadlines CROWD YOU!
Save Vital Minutes
WITH
C&G SAW TRIMMERS
MODELS 3-A
and 45
Day by day C&G Saw Trimmers set new high-efficiency standards with faster work, greater accuracy and improved safety — all at lower maintenance cost. Your experience with other saw trimmers may make this hard to believe, but there's plenty of proof in your copy of the new C&G 3A-45 folder. It's free... and waiting to go out the moment your request comes in. No obligation.
THE Morrison COMPANY
125 W. MELVINA STREET • MILWAUKEE 12, WIS.

producing companion machines to the New Era Presses for the stringing and wiring of tags and booklets.

Employee Service Record

Some employees have been with New Era for 34 years. The present manufacturing plant covers more than 40,000 sq. ft. of floor area. New Era presses are now available in five different sizes: 6 in. by 6 in., 9 in. by 12 in., 12 in. by 12 in., 12 in. by 18, and 13 in. by 28.

Guinea Pig Press

A 9 in. by 12 in. press is set up in the plant for demonstrating and performing actual fabricating operations to customer's requirements. It can print two colors on the top of the web and one color on the bottom of the web, punch, perforate, number, die-cut, rewind or cut off. This press is often used by various paper and ink companies to try out any new products that may be on the market.

Golden Anniversary Booklet

In commemoration of this half-century of progress, a Golden Anniversary Booklet has been printed and copies are available to the trade. In addition to the picture and story of the pioneer press, the latest model New Era Multi-Process Press, congratulatory letters and samples of work turned out are shown in the booklet.

Saved $12 a month per typesetting machine in our newspaper composing room with MONOMELTS*

"During the last 25 years in our newspaper composing room, we have saved $12 a month per typesetting machine on fuel alone. By installing MONOMELT single-melting feeders on our linecasting machines, we practically quit using our pigging furnace. Before that, our fuel bill for repigging 45,000 lbs. of metal averaged $300 per month. By melting our metal only once each time we used it, we saved nearly all of this, for melting the metal with a MONOMELT requires only 15% more fuel than the machine pot alone. It's simple arithmetic: $\frac{\$300}{25} = \$12$ per month *SAVED* by each MONOMELT. So MONOMELTS pay for themselves within 2 years, and they last a long time. After 25 years of constant use, ours still give good service. In addition, MONOMELTS give your machine more production of consistently solid, sharp-faced slugs. And your type metal stays in balance longer, too."

Firm name furnished on request.

****MONOMELTS are single-melting feeders for linecasting machines,* Ludlows, Monotypes, *and* Elrods. *Dead metal goes directly from kill-out to MONOMELT pot. It feeds clean molten metal automatically into the machine pot at a constant level and the ideal casting temperature.***

Write today for information.

THE **MONOMELT CO., Inc.**

1611 N. E. POLK STREET MINNEAPOLIS 13, MINNESOTA

Low Friction Lubricant

What is claimed to be one of the most important developments in recent years in the science of lubricating high-speed, high-temperature and high-pressure bearings has been the use of the rare metal molybdenum in place of, or supplementing, regular lubricating oils and greases. Molybdenum is an extremely greasy metal, practically indestructible at high temperatures and pressures, certain forms of it having the peculiar faculty of plating itself firmly to any friction surface. This forms a permanent friction-supporting film which, it is claimed, cannot be squeezed out by any amount of pressure, thus protecting the bearing against scoring or seizing even after all the oil has been burned out.

Molybdenum lubrication has now been made available in a form suitable for use in any conventional lubricating system. The Lubricants Div. of The Lockrey Co. has announced a molybdenum-base lubricant called Liqui-Moly. This can be used alone, or added directly to crankcase or other oils which carry it to the friction surfaces, where, the sponsor states, it plates out on the metal, providing a permanent, low friction, anti-seizing coating. Sponsor claims that tests have shown that friction-surfaces running at high speed and under heavy pressure will heat up from 300 per cent to 504 per cent faster with ordinary lubricating oil than when running dry with only Liqui-Moly. Temperature-rise with oil, it is stated, is continuous until failure and seizure, whereas with Liqui-Moly it reaches a stabilization-point and then usually recedes.

In further claims it is stated the material displays remarkable chemical stability, and is unchanged in its properties by extremes of temperature, operating effectively either at sub-zero or red-heat. Typical applications aside from conventional use in automotive and other bearing and gear applications, are its use for the elimination of run-in time on precision-fit bearings end slides; as a pipe-fitting compound; reducing friction and freezing in press-fitting; preventing sticking of tight, tight-wound, flat coil springs, and in the permanent factory-lubrication of new products.

Safe Working Environment

The economic advantage of a safe working environment is often given the most stress in considering an industrial safety program, but human relations is also a highly important aspect in this work, according to Thomas Roy Jones, president of the New Jersey Safety Council and president of ATF Incorporated.

"Every business wants to stand well in the community in which it is located. This is important from many standpoints. First, every business wants to attract qualified and competent workers. Once such workers are employed, it is even more important that they be satisfied and co-operative employes. Management cannot forget for one moment that each employe is a public relations repre-

sentative for the company for which he works. What the majority of the workers think about their company is, by and large, what the community thinks. If the workers know that their management is using every known safety measure to protect them on their jobs, that company will win the regard of the community as being a safe place in which to work. If on the other hand, the workers do not feel that their safety is being considered, and they are justified in the thought, then no amount of public relations activities can give the company a good reputation unless those conditions are corrected."

Forms Own Organization

William Recht, former vice president and director of Sun Chemical Corp., has announced that he has established his own business to handle the sale and purchase of products used in the Graphic Arts Industry, both here and abroad. G. A. Miller, who has been associated with Mr. Recht for over two decades, is a member of the newly formed concern. Headquarters of the organization is at 50 Church St., New York, N. Y.

Lithographic Service

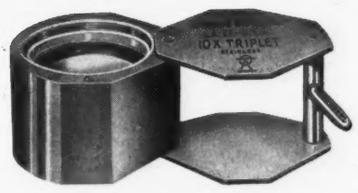
Dye-Trans Color Photo has announced a color separation negative service for lithographers which is claimed to reduce the amount of hand work required on litho plates. Through the Dye-Trans method a set of negatives can be produced that have been masked for contrast, masked to reduce overlapping colors, masked for detail and which are claimed to be accurate within 1 per cent color balance. According to M. E. Parobek, President of the firm, much of the retouching will be performed on the separation negatives in the Dye-Trans plant, thus chopping the time that must be spent in retouching the plates by the lithographer.

The firm has a $100 thousand color photo print laboratory in Oceanside, Calif. Electronic eyes and controls are employed in the color darkroom to scan the color transparencies and select the correct filters for the separation negatives.

As an example of the way color accuracy is obtained, Parobek cited the filter system used in the Dye-Trans darkroom. It is equipped with more than 200 filters, which permit gradations as little as 1 per cent. The average darkroom, he stated, is equipped with about 9 to 12 filters with the result that color variations range as much as 25 per cent.

"Extra-Depth" Engravings

MOSSTYPE Corporation has announced that "Extra - Depth" photoengravings for specialized use as rubber printing plates are now available. Sponsor claims the "Extra-Depth" engravings are etched and routed deeper than engravings used for direct printing. It is further claimed that the engravings are not undercut in etching, and retain register and size control. A bulletin is available.

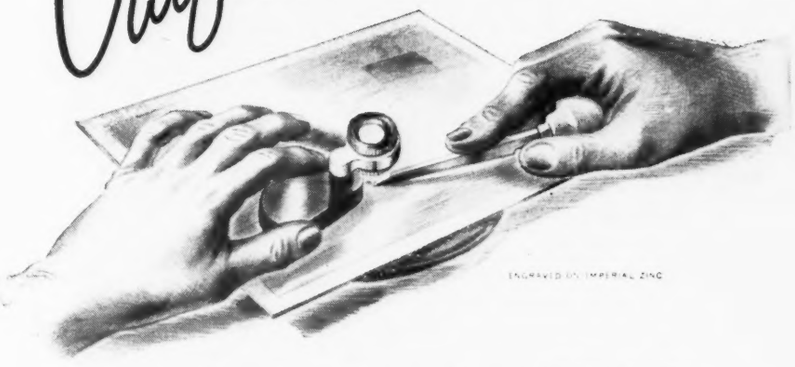


Pocket Microscope — Designed for lithographers, printers and engravers is the Triplet 10X Pocket Microscope announced by Stratex Instrument Co. Sponsor claims maximum allowable error in curvature is 2½ wave lengths on exterior surfaces and 5 wave lengths on balsamed surfaces. For protection against attrition and chemicals, the three cemented lens elements are mounted in a hard-finished aluminum lens cell protected by a stainless steel frame. A chain ring provides for attachment to watch chain or neck cord.

Layflat Paste

A PASTE that the sponsor claims will eliminate warping, wrinkling, and puckering in pasted paper items, has been announced by Paisley Products, Inc. Designated Flexiflat, the paste may be applied by finger, brush or rubber-tipped applicator. It is recommended for mounting pictures and photographs, tipping greeting cards and calendars, photomount construction, displays, art layouts, etc. The plasticized paste can be diluted with water.

Craftsmanship



from start to finish

Craftsmanship of high order is required to turn out etchings that are faithful reproductions of the originals. So in the manufacture of the zinc, the basic etching material. ★ Imperial zinc, from spelter to finished sheet, is likewise the product of specialists . . . cast, rolled and finished by craftsmen who serve the graphic arts exclusively and have at their command the facilities of the most modern zinc plant in the industry. ★ Try Imperial for yourself. Order a case today. You'll agree there *is* a difference.

EXHIBITOR GRAPHIC ARTS EXPOSITION CHICAGO SEPTEMBER 11-22-1950

Booth No. 287

Imperial Zinc

A Product of

IMPERIAL TYPE METAL COMPANY

SERVING THE GRAPHIC ARTS *Exclusively*

PHILADELPHIA 34 • NEW YORK 7 • CHICAGO 50

In Canada: Latimer, Limited, Toronto 2B

Color Copy-Lighting Lamps

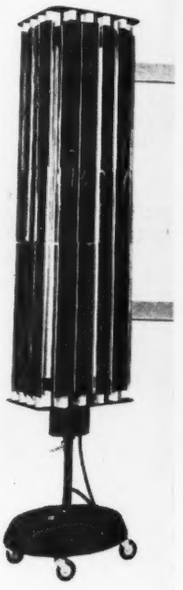
DESIGNED for making color separation plates on opaque copy or transparencies is a four-color, rotating turret, copy-lighting lamp announced by Microtronics Corporation. The color separation equipment combines Slimline fluorescent tubes in banks of four with a turret arrangement for producing the desired filtered color light.

Each side of the turret carries four fluorescent tubes—one set pink, another green, the third blue and the fourth white. Each tube has its own set of reflectors. The reflectors are provided with a guide channel on the front edge to facilitate insertion and removal of red, blue or green filters. Sponsor claims these filters restrict the light emitted from the tubes to a narrow spectral region, thus eliminating overlap and insuring maximum color separation.

In operation, two identical lighting units are used, one on each side of the copyboard. The lighting unit consists of a heavy cast base, central support, four-sided turret and a set of reflectors and filters. The base contains a foot-operated on-off switch, cord to connect to any 110 v., a.c. outlet, selector switch to cut out two lamps when less light is required, and a socket to connect to the turret.

The turret rotates in a central tubing and can be adjusted up or down approx. 6 in. for various copyboards. The turret also contains a rotary switch, which automatically connects the proper set of tubes to the power line whenever that set faces the copyboard. An indexing mechanism positions each set of tubes in relation to the copyboard as the turret is rotated from color to color.

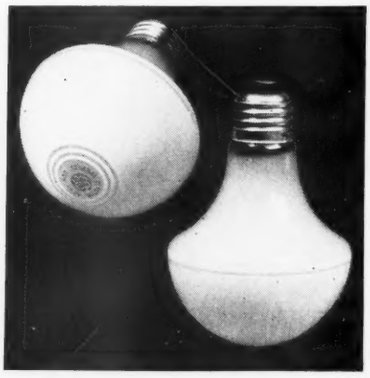
The reflectors carry holding clips, which can be clipped on the tubes themselves. The contour of the reflector has been designed to pick up the back light and redirect it in a concentrated con-



Illustrated above are two four-color rotating turret, copy-lighting lamps in front of a cut-away section of a copyboard. Manufactured by Microtronics Corporation, the lamps are employed in making color separations by the use of color filtered fluorescent light source.

trolled beam towards the copyboard. The clips permit rotation of the reflectors around the tubes for directing the light onto the copyboard wherever required.

The G-E 64 in. tubes used in the color separation units are of the instant starting variety. Total height of the unit is 7 ft., 7 in. at low setting, and 8½ ft. at max. upward adjustment. Base diam. is 21 in. Weight of one complete unit is 155 lbs.

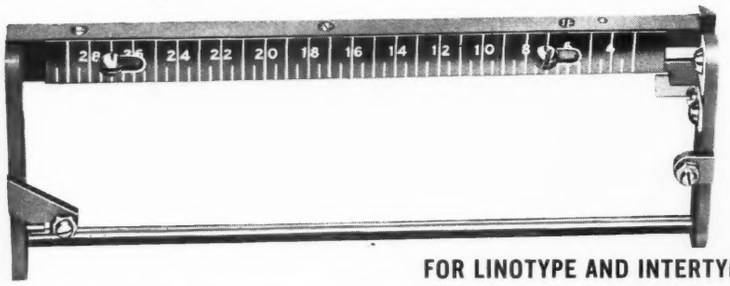


G-E Bulb for Ceiling Fixtures — General Electric's Lamp Dept. has announced an incandescent electric light which employs a different shape and an enamel finish to form a combined light source and fixture in one unit. G-E states the different shape directs two-thirds of the bulb's light upward, creating an indirect lighting effect. The lower portion of the bulb is covered with a soft-toned, permanent enamel finish, three concentric rings in the enamel, and a clear spot at the bottom of the bulb for improved lighting, claims the sponsor. The bulb's diam. is 3½ in. at the widest point and is available in the 50 w. size.

Don't forget the little things!

The secret of our success—and we offer it to you—has been our attention to little things . . . time-wasting, irritating little things that sap production time.

Some years ago, we introduced the Adjustable Assembling Elevator Gate; now it is the *Everlasting* Adjustable Assembling Elevator Gate.



FOR LINOTYPE AND INTERTYPE

Here is a Gate with the advantages of the covered pawl,—(better assembling and protectection for the pawl),—but without the disadvantages of premature wear.

The new Star Gate is made in two parts, the basic gate and a replaceable top rail. The part that wears, the rail, is HARDENED for longer wear. Now you can replace **just the rail,** without removing the gate, as quickly as you can remove and replace the three screws which hold the rail to the basic gate.

This basic gate is the same for all late models, large or small Star Wheel. To convert: **Just change the top rail.** Less stock to carry if you have more than one type assembling elevator in your battery.

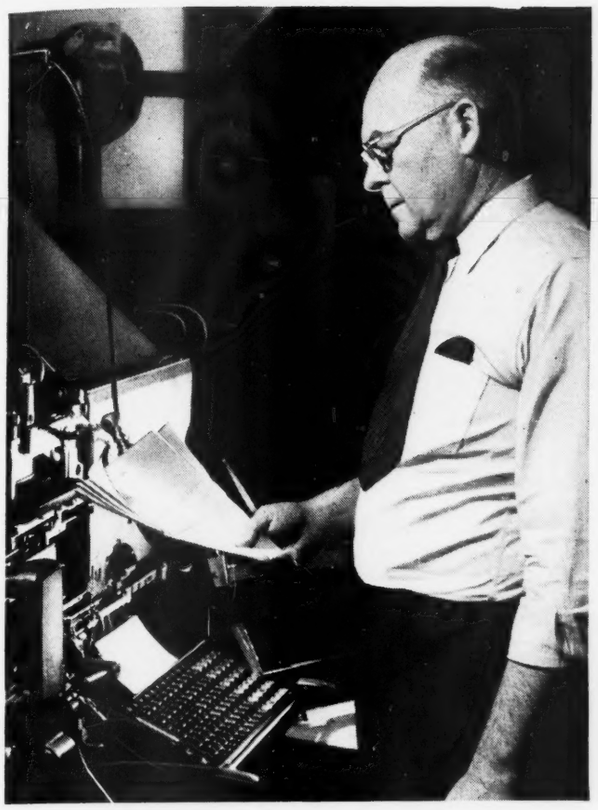
A folder with all details is available, or order one on approval by your regular part number.

PRECISION TRADE ★ MARK

LINOTYPE PARTS COMPANY

Factory and Main Office SOUTH HACKENSACK, N. J. — INCORPORATED — Branch Office 1327 BROADWAY, KANSAS CITY 6, MO

CHICAGO · MINNEAPOLIS · DENVER · NEW YORK · BOSTON



"To me as an operator, Blatchford's the buy because

. . . it melts smoothly—flows freely—molds sharply—sets quickly."

No question about it, Blatchford Metal has *everything* it takes to enable your operators to do the best possible job on their machines. And there are reasons for this—three good reasons.

Reason No. 1—the lead, tin, and antimony are top quality. Metal resources and research facilities unmatched in the field assure this.

Reason No. 2—these metals are precisely proportioned. No rule of thumb in Blatchford operations!

Reason No. 3—alloying operations are under rigid control—every batch of Blatchford reflects nearly 100 years of metal-mixing know-how.

Ask your operators—your make-up men and pressmen, too—what metal best fills the bill. Chances are they'll say, "Blatchford." Try it . . . you'll see why.

Keep your metal stock always up to par—use the famous *Blatchford Metal Maintenance Service.* Write for details.

NATIONAL LEAD COMPANY, *Atlanta, Baltimore, Chicago, Cincinnati, Cleveland, Pittsburgh, St. Louis; National Lead Co. of Mass., Boston; E. W. Blatchford Co., New York; Morris P. Kirk & Son, Inc., Los Angeles; American Lead Corp., Indianapolis.*

Blatchford . . .
the NATIONAL name for dependable metal

Makers of the famous Blatchford "Honeycomb" Base

when Good make-ready is called for...

With Cromwell Special Prepared Tympan, your make-ready troubles are over. It's *extra* hard. Every sheet is uniform throughout. Cromwell Tympan has amazingly high tensile strength and absolute resistance to oil, moisture and atmospheric changes. With Cromwell you get clean, sharp impressions every time. And it's UNCONDITIONALLY GUARANTEED!

Cromwell Paper Company
4801 South Whipple Street, Chicago 32, Illinois

I'd like to try Cromwell Tympan. Please send me a sample sheet. No obligation, of course.

Name.....

Firm Name.....

Address.....

City..... Zone..... State.....

Press Make..... Sheet Size.....

(check)—Square cut ☐ Clipped, scored ☐

Try Cromwell Yourself! Fill Out This Coupon For a FREE Working Sample—

CROMWELL PAPER COMPANY
4801-39 South Whipple Street, Chicago 32, Illinois

School Bus Safety

Illinois, Oregon, and several other states require Red Cross first aid training for school bus drivers. In Illinois alone, more than 50 Red Cross chapters conducted such training in the 1948-49 school year.

PRIOR TO:
PRINTING
CUTTING
PADDING
BINDING
FOLDING

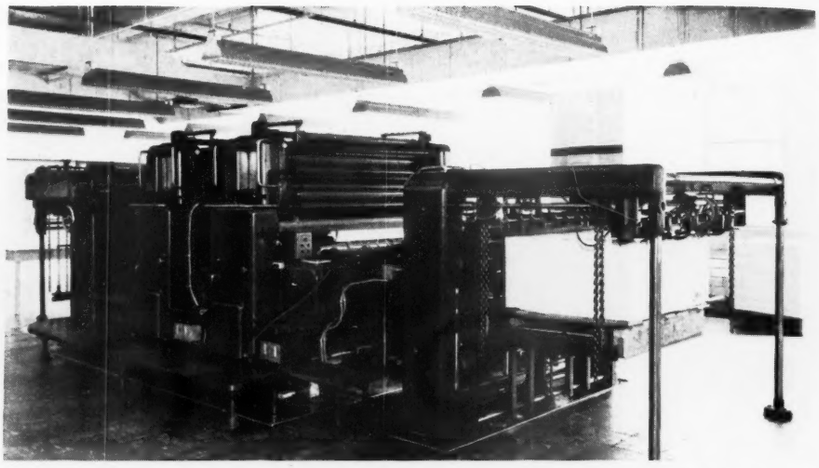
JOG FASTER and BETTER

WITH
SYNTRON
PAPER JOGGERS

PUNCHING
TRIMMING
OFFSETTING
ETC.

Save time and money aligning heavy board to onionskin.
Write for literature

SYNTRON CO.
577 Lexington, Homer City, Pa.



Miehle No. 61 Two-Color, Sheet Fed Rotary Letterpress recently installed in the new and enlarged building of the Gospel Publishing House, Springfield, Mo.

Gospel Publishing House Shows Miehle Letterpress

Some 4000 residents of Springfield, Mo., saw the modern printing plant of the Gospel Publishing House in operation recently during an open house. The Gospel organization publishes a number of periodicals with a total circulation of over 1.5 million, and also prints religious books, pamphlets and tracts of all kinds.

Three hundred people are employed in the new plant, which is fully air conditioned and well-lighted by skylights and fluorescent fixtures. Recently installed at the Gospel plant is a Miehle No. 61 Two-Color Rotary Letterpress.

Maximum sheet size of the press is 42 in. by 60 in. The press operates at speeds up to 6000 sheets per hr. It is built on the unit principle of construction, with a separate impression cylinder for each color unit.

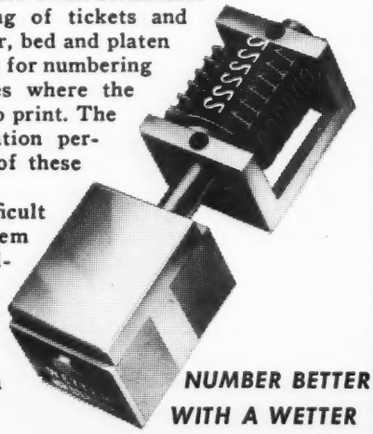
The plate cylinders can be declutched to permit plating of both units simultaneously. The press prints from curved electrotypes, stereotype or plastic plates. The Gospel Publishing House has also installed equipment for molding and curving plastic plates.

CENTER DRIVE FOR
HIGH SPEED TICKET NUMBERING

THANKS TO WETTER ENGINEERING SKILL

This Wetter center driven model handles high speed printing of tickets and coupons on cylinder, bed and platen presses . . . valuable for numbering on cylinder presses where the numbers only are to print. The center shaft operation permits multiple use of these machines.

If you have a difficult numbering problem why not take advantage of Wetter's specialized experience in this field? Further information gladly sent upon request.



NUMBER BETTER WITH A WETTER

6276

WETTER NUMBERING MACHINE CO.
ATLANTIC AVENUE & LOGAN STREET • BROOKLYN 8, N. Y.
SOLD BY ALL DEALERS AND BRANCHES OF A. T. F., INC.

"Not much rushing around But things get done"

Such is the comment of the visiting superintendent, after watching production of the paper he has long admired.

"We have a schedule," explains the stereo foreman, "and we live up to it. Of course everything has to be in tip-top condition and our materials must be right. Take Certified Mats, for example. They come so even that I can't remember a minute's delay we could trace to a Certified Mat.

For dependable stereotyping, rely on Certified Mats
Certified DRY MATS
CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

Style KP has Power Inker
Style KA has Automatic Inker

IT'S A
CHALLENGE®

It's the new Series K. And that's another way of saying ***clean, sharp, uniform proofs every time.***

The new Challenge Series K Proof Presses are all cylinder press design with the cylinder revolving while the reciprocating bed rides on anti-friction rollers. All three models are equipped with cylinder grippers and micrometer side guides, a foot trip to prevent offset on the cylinder packing during the return stroke, and a sliding feed board to give easy access to the cylinder packing. Two sizes in each style.

Get complete details today!

Style KE has 20" Ink Distributor

Style K has Ink Plate

613

THE CHALLENGE MACHINERY COMPANY

GRAND HAVEN, MICHIGAN

Challenge Reg. U. S. Pat. Off.

Over 50 Years in Service of the Graphic Arts

DEALERS IN ALL PRINCIPAL CITIES

None Does the Job Like

Perfection

MAILING PAPERS

The World's Leading Brand of Communication Papers

Send for this FREE descriptive booklet containing samples of PERFECTION Communication Papers.

Perfection IS YOUR PROTECTION

PAPER MANUFACTURERS COMPANY

PHILADELPHIA 23 PENNSYLVANIA

Books Received

(Continued from Page 20)

forms for the data and calculations, and curves from which the factors are readily obtainable in determining humidity load conditions.

Niagara states the method gives constant control of air temperature and humidity in both summer and winter. Hygrol, a hygienic absorbent liquid, is used to remove moisture directly from the air, needing little or no refrigeration according to the company.

The frontispiece of the manual contains a three color diagram which shows the process by which air is dehumidified by the Niagara method. The Hygrol liquid spray absorbs the moisture from the air stream. The conditioned air is delivered at the precise temperature and humidity required. Constantly diluted by absorbing moisture from the air, the Hygrol liquid is reconcentrated automatically by the evaporation of water from it.

Niagara Controlled Humidity Method—Consists of 52 pages, plus an insert of the Bulkeley Psychrometric Chart and an insert descriptive of Niagara Air Conditioning Equipment. Page size is 8½ in. by 11 in. Plastic comb binding. Price is $2.50 per copy. Published by Niagara Blower Co., 405 Lexington Ave., New York 17, N. Y.

Variable speed control gives you speeds of from 24 to 48 head revolutions per minute . . . or from 24 to 48 feeds per minute on "strike" work depending on skill of operator. Perforating heads are interchangeable with all former Pony Rotary Round Hole Perforators. Machine built in one size only, to take sheet a full 30" wide. Modern design and materials . . . aluminum end castings, roller bearings on main shafts, new "strike" mechanism, chrome plated feed gauge, etc. *Price?* You're in for a big surprise! Write for *new bulletin* and the *new low* price on this Rosback Pony *Vari-Speed* Rotary Perforator. Or ask your Rosback Dealer.

EXHIBITOR GRAPHIC ARTS EXPOSITION CHICAGO SEPTEMBER 11-23-1950

F. P. ROSBACK COMPANY, *Benton Harbor, Mich.*

World's Largest Manufacturers of Perforators, Gang Stitchers and Paper Punching Machines

D'Arcy Plant Expansion

In 1927, the D'Arcy Printing & Lithographing Corp. was a small letterpress job shop known as the Centre Press and located in a loft among New York's metropolitan maze. In 1935 the company moved into the present D'Arcy Building, doubling its floor space to 2000 sq. ft., and adding some offset equipment.

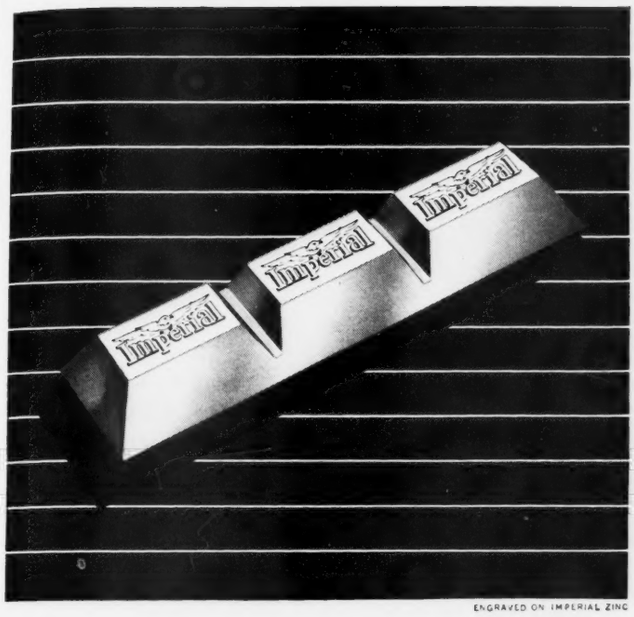
Since the end of the war, the D'Arcy plant has expanded with the installation of a 50 in. by 69 in. four-color offset press modernization of the art and platemaking departments, the purchase of the 12 story building at 124-132 White St., and the expansion of its floor area to the present 40,000 sq. ft.

Facilities now include art, camera, and platemaking departments, and offset presses from 17 in. by 22 in. to the 50 in. by 69 in. size. In the letterpress division a complete composing room, built around three Linotypes, aids both letterpress and offset operations. The finishing and bindery departments include equipment for cutting, die-cutting, embossing, perforating, folding, collating and stitching.

Robert Weber, appointed Vice President in Charge of Sales, D'Arcy Printing & Lithographing Corp.

A wide range of work is produced, about 90 per cent of it in color. This includes advertising material of all kinds, books, posters, displays, perforated stamps and coupons, folders, booklets, and die-cut and embossed specialties. Offset lithography now accounts for about 75 per cent of the total volume of business.

In line with the expansion program, William Weinstein, President of D'Arcy, has appointed Robert Weber as a member of the firm with the office of Vice President in Charge of Sales and Sales Promotion. The appointment is effective January 2, 1950. Mr. Weber joined the company as a salesman in March, 1947, and was formerly on the sales staff of Woodrow Press, New York. Other company executives include Nathan Weinstein, Secretary-Treasurer; George E. Ruegg, Vice President in Charge of Art and Platemaking; Fred Henning, in charge of production; Daniel H. Weber, in charge of estimating; and James H. O'Neill, with a 20 year record on the sales staff.



ENGRAVED ON IMPERIAL ZINC

When you specify "Imperial," *type metal becomes the least of your worries*

★ To save the expense of poor casts, machine shutdowns and other production losses that come from deteriorated or contaminated type metal, be sure that your working metal supply is *always* up to specifications.

For Imperial users this is easy to do. At regular intervals, as often as you like, send samples of your working supply to our nearest office. (We furnish the mailing envelopes.) In return you will receive promptly, without charge, accurate laboratory analyses *plus* specific recommendations stating exactly what your metal needs to bring it up to par if necessary.

Periodic Analysis Service (originated by Imperial for the benefit of Imperial users) is only one of the several ways in which Imperial relieves you of type metal difficulties. Ask our representative to explain the complete Imperial "Better Metal—Better Printing" Program next time he calls.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 11-23-1950
Booth No. 287

Imperial
TYPE METAL COMPANY
Serving the Graphic Arts Exclusively
PHILADELPHIA 34 · NEW YORK 7 · CHICAGO 50

BEVERIDGE *Says:*

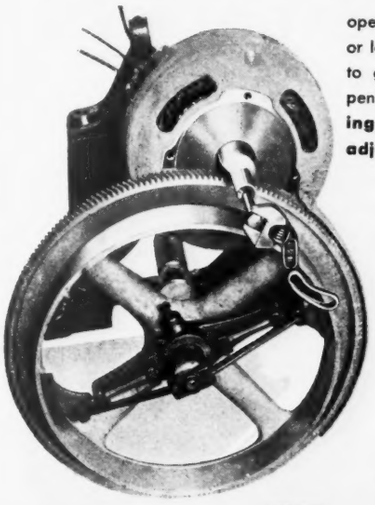
"TAKE A SECOND LOOK AT YOUR PRINTING"

Yes, that's what we mean—take a second look. The first look may satisfy you that you are getting printing that meets the approval of advertisers, readers and the front office. But for your own pride of workmanship, take a good second look . . . perhaps there are imperfections that could have been eliminated by using a better dry mat. Go even further . . . order a case of BEVERIDGE QUALITY MATS—try them out. You can be sure that your second look, when you're using BEVERIDGE DRY MATS, will reveal a quality of reproduction that you have not experienced.

New Products Division
The Beveridge Paper Company
Indianapolis 4, Indiana

One Thing the Machinist will Like About the CUSHMAN OFFSET MOTOR

What is it the machinist likes about a Cushman Offset Motor? For one thing, there is the ease and speed with which he can change a pinion. He simply removes three screws, applies the pinion puller, and the old one is off. He puts a new one on the shaft, returns the cover. This simple operation takes but ten minutes or less and the machine is ready to go again on its merry dependable way, **without having disturbed the motor adjustments.**



To find out more about the Cushman Offset Motor, write

PRECISION TRADE ★ MARK
LINOTYPE PARTS COMPANY
INCORPORATED
Factory and Main Office
SOUTH HACKENSACK, N. J.
Branch Office 1322 BROADWAY, KANSAS CITY 6, MO.
CHICAGO · MINNEAPOLIS · DENVER · NEW YORK · BOSTON

Tingue, Brown Main Office

Announcement of the purchase of a two-story building to house the main office and warehouse of Tingue, Brown & Co., was made recently by John W. Foster, President of the firm. Address of the new building is 1761-9 Carter Ave., New York, N. Y. According to Mr. Foster, the company plans to move into their new quarters about the middle of the year.

Recent EBCO Installations

M. O. Brewer, Sales Manager of the Printing Machinery Div., Electric Boat Co., has announced the installation of EBCO 22 in. by 34 in. Single Color Offset Presses in the following plants: Swift & Co., Printing Dept., Chicago, Ill.; Taylor Publishing Co., Dallas, Tex., and Thomason & Morrow Co., Fort Worth, Tex. Other installations, according to the announcement, have been made in India and New Zealand.

Offers Stereotype Booklet

Joe Goggin, Sales Manager of the Newspaper Publishers Supply Co., has issued an eight page booklet entitled *Molding and Casting Factors in the Stereotyping Processes*. The booklet is a reprint of two addresses presented by Mr. Goggin at newspaper mechanical conferences during 1949. Explanations of mat temperature, mat thickness, mat shrinkage, mat density, mat storage, stereotype chases, and application of pressure factors are some of the high points included under *Molding Factors*. *Casting Factors* include inspection of mold, spaces, backing felt, drying and forming mats, metal, casting equipment, metal pour, etc. Copies of this booklet are available by writing Mr. Goggin at Newspaper Publishers Supply Co., 1639 N. Lorel Ave., Chicago 39, Ill.

Anchor Chemical Dealers

Edward S. Jasser, Vice President in Charge of Sales of Anchor Chemical Co., Inc., has announced the appointment of the Northeast Printing Equipment Corp. as a dealer for Anchor chemicals and pressroom supplies. Representatives for Northeast are Gordon N. Shapiro, Gordon Law, Morton G. Freed and David M. Taylor. Address of the new dealer is 415 Second St., Everett, Mass. Other New England dealers announced by Anchor include the Merit Printers' Supply Co., 355 Trumbull St., Hartford, Conn., and Archie M. Strout, 69 Wolcott St., Portland, Me.

Mechanical Executives are invited to submit to the editor ideas which will be of help to their fellows.

for Better Plates! Better Printing!

★ CENTRIFUGAL CASTING PROCESS for curved electrotypes

★ HYDRO-CASTER for flat electrotypes

These new methods of manufacturing electrotypes are available to you—for further information write

Printing Plate Supply Company

343 South Dearborn Street • Chicago 4, Illinois

How Many Tubes of **BOOTH'S ZINK CUT CEMENT** *on Hand?*

If you have not ordered recently, take a check now and see how many tubes of this high quality ZINK CUT CEMENT you have on hand. Don't wait until you are all out—order a new supply now. BOOTH'S ZINK CUT CEMENT is unbeatable for quickly mounting cuts and holding them fast . . . used in all good composing rooms and stereotype departments.

Prices: 75c per tube, $6.00 per dozen in the United States.

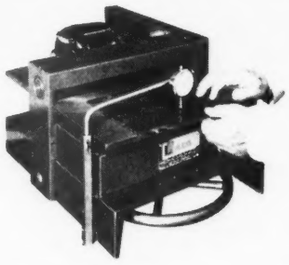
HAVE YOU TRIED BOOTH'S RUBBER ROLLS?

You'll find them smooth . . . always receptive to line composing machine keyboard cam action. More than that, they have maximum cam gripping qualities and high resistance to glaze. They are of even diameter when properly applied to the roll shaft. They're *always* good. Send for yours now.

Prices: $1.45 per pair, $7.75 per dozen.

E. A. BOOTH RUBBER CO. • 2855 SCARBORO ROAD CLEVELAND HEIGHTS, OHIO

If you use *Rubber Printing Plates* You Need A



HACO PRECISION RUBBER PLATE GRINDER

not only to level plates that are uneven because of variance in type, cuts, and etc., but it will grind your plates to the thickness you desire.

Write today for free booklet

O. C. HANEY CO.

1206 MAPLE AVE.
LOS ANGELES 15, CALIF.

AMERICA'S LEADING
NEWSPAPERS
USE
VULCAN
Press Blankets

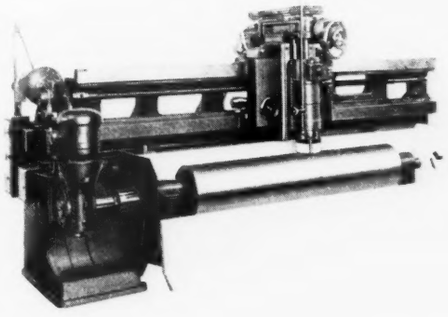
Continuous research has made VULCAN Blankets the outstanding press packing in Newspaperdom.

Let us show you what VULCAN Press Blankets can do for you—under your own pressroom conditions.

Vulcan
PROOFING COMPANY
FIRST AVENUE & 58th STREET • BROOKLYN 20, NEW YORK

Pacific Coast Representative: THE CALIFORNIA INK COMPANY, INC.

Canadian Representative: SEARS LIMITED, TORONTO



ROTOGRAVURE
GRINDING AND POLISHING MACHINE

Precision Built to Grind and Polish to .0003"

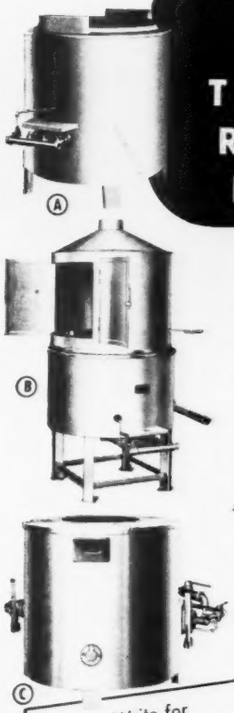
Manufactured in two sizes, each being able to handle varying diameters and lengths of cylinders. Special Intaglio stones, using a combined concentric and eccentric motion give a smoother surface in shorter time than obtained with other machines. Water as a coolant eliminates all dust. Precision automatic feed—either continual or at end of each traverse—compensates for stone wear while grinding. When polishing cylinders, stone is "floated" with continuous adjustable pressure, resulting in a higher finish than obtained with paper. Variable speed motors permit a choice of grinding and polishing speeds.

STANDARD PROCESS CORPORATION
Manufacturing Gravure Equipment & Supplies
2704 W. Roscoe Street • Chicago 18, Ill.

Oldest in the Country-
WOOD DRY MATS
First in the Field!

1950
35th Anniversary of America's Pioneer Mat Manufacturer
•
This year Wood will produce its 200 millionth dry mat

WOOD FLONG CORP.
HOOSICK FALLS, N. Y.
NEW YORK CITY OFFICE:
551 FIFTH AVE. • NEW YORK 17, N. Y.



'Surface'
TYPE METAL REMELTING FURNACES

'Surface' Gas-Fired Furnaces for type metal remelting are designed to provide the industry with an efficient, rapid melting furnace of long life.

(A) 'Surface' Type Metal Remelting Furnace equipped with Atmospheric Burner and bottom outlet. Available in capacities up to 5000 pounds of metal.

(B) Same furnace as A equipped with hood.

(C) 'Surface' Type Metal Remelting Furnace equipped with Pressure Burner. Standard models available with capacities up to 3200 lbs. of metal.

Write for Bulletin SC-130-A and Specification SV-49

SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO

Football Star Joins Baum — Glenn Davis, former West Point football star, is shown learning the operation of a Baumfolder at the plant of Burke & Gregory, Norfolk, Va. Mr. Davis recently joined the sales force of Russell Ernest Baum, Inc.

Summer Printing Courses

Intensive Graphic Arts courses for instructors and industry personnel will be held from June 26 to August 5, according to an announcement by the Department of Printing Administration, Carnegie Institute of Technology. The six week program will include courses in planning, designing, estimating, cost accounting, and management instruction, as well as skill development courses in composition, presswork, and photolithography. The 1950 Summer Session Catalog is available to those interested in the printing courses.

Carnegie Student Tour

A tour of printing and allied plants in New York and Philadelphia was made recently by 40 senior printing administration students at Carnegie Institute of Technology. The group was in charge of Stanley C. Hlasta, Assistant Head of the Printing Administration Dept.

Carnegie Catalog

The Dept. of Printing Administration at Carnegie Institute of Technology recently issued a 32 page booklet describing the four year course offered by the college. The various courses included in the curriculum are described, plus an introduction to printing administration, achievements of Carnegie printing graduates and the development of Graphic Arts training from 1913 to 1949. Text for the booklet is set in Intertype Egmont Medium and the display in ATF Lydian and Bauer Trafton Script. The inside illustration were reproduced by offset and the text by letterpress.

Carnegie Alumni Reunion

The annual alumni reunion of the Printing Administration Dept. at Carnegie Institute of Technology will be held in Pittsburgh on April 21 and 22. Russell Hogan, President of the International Association of Printing House Craftsmen, will speak at the opening session on *Internal Plant Control*. The meeting will include formal and informal discussions on the related fields of printing. George Welp, Advertising Manager of International Printing Ink Corp., is scheduled to speak at the Saturday luncheon. President of the Printing Administration Dept. Alumni is Charles E. Schatvet, President of Guide-Kalkhoff-Burr, Inc., New York, N. Y. The Carnegie alumni group in the New York area will be in charge of arrangements for the meeting, with James B. Ashwell, Vice President of The Equity Press, Inc., New York, N. Y., as Program Chairman.

Printing Equipment Engineer is always glad to help you find where it's made.

"REGAL" by New England

This name for our new Monocork Blankets is fast becoming the "buy" word of pressmen who are discovering the advantages we have built into this material.

If you have not yet had an opportunity to see what "REGALS" can do for you, now is the time.

YOU BE THE JUDGE!

NEW ENGLAND NEWSPAPER SUPPLY CO.

164 FREMONT STREET
WORCESTER MASSACHUSETTS
BRANCHES: New York—Chicago—San Francisco—Tulsa

HERRICK Inks

WILLIAM C. HERRICK
Ink Company, Inc.
FINE NEWSPRINT, LETTERPRESS, & OFFSET INKS
EAST RUTHERFORD, N. J.

Key Buyers **read**
PRINTING EQUIPMENT Engineer
Tell them about your
Surplus Equipment
Classified Ad Rates on Page 71

"Keep your presses rolling with Ohio Rollers"

Our Duro-Major all-season rollers are in use in every state in the Union

OHIO ROLLER COMPANY

4408 Detroit Ave., Cleveland 13, Ohio — 6333 E. Canfield (Rear), Detroit 7, Michigan

Elects Trustees and Officers

Elected trustees of Printing Plates Research, Inc., at a recent meeting of the organization held at Battelle Institute in Columbus, O., were: Joseph Schwartz, Westcott and Thomson, Inc., Philadelphia; R. R. Myers, Capital City Printing Plate Co., Des Moines, Ia.; Raymond Kreber, Van Bolt-Kreber Electrotype Co., Columbus, O.; George Scott, New England Electrotype Co., Boston; Sam Ross McElreath, Sam Ross McElreath Co., Dallas; Dennis Hoynes, The Central Electrotype Co., Cleveland, and Charles McNellen, Bomac Electrotype Co., Ltd., Toronto, Canada. At a subsequent meeting of the trustees, the following officers were re-elected: Mr. Schwartz, President; Mr. Myers, First Vice President; Mr. McElreath, Second Vice President, and Mr. Kreber Secretary-Treasurer. J. Homer Winkler of Battelle Institute was reappointed manager for the coming year.

Type and Press Moves

It has been announced by President Henry Spero that Type and Press of Illinois has been moved to its own new building at 3312 N. Ravenswood Ave., Chicago 13. Combined under one roof now are general office, machine shop and warehouse. New phone numbers are BUckingham 1-4330, 1-4331 and 1-4332.

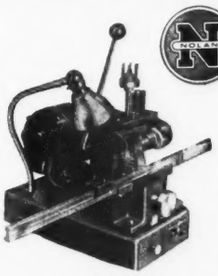
Mistaken Identity

Donald T. Sutte of the Electro-Matic Engraving Co., Chicago, reports that a burglar broke into his plant recently and proceeded to open the office safe. Finding only some petty cash, he evidently came to the conclusion that the heavy folding money was kept in a larger and better safe. He instituted a diligent search. Wandering into the darkroom, his eye caught the dial indicator on the vacuum back of a Consolidated color camera. Surely, thought he, this must be the safe where they keep all the money, and went to work with his trusty sledge and safe-breaking tools. No doubt his face turned red when he found himself inside a process camera.

CHAPMAN
ELECTRIC NEUTRALIZER CO.
PORTLAND 6, MAINE
Write for Bulletins on Cylinder and Offset Presses, Folders, Slitters, etc. Also Special Applications
Specialists in the Elimination of . . .
STATIC
SAFELY · INSTANTLY

Write . . . for a copy of the new Vandercook Illustrated Price List
Shows Vandercook Proof Presses, Test Presses, Block Leveller, Plate, Type and Slug gauges —with descriptions, specifications and prices.
VANDERCOOK & SONS, INC.
900 North Kilpatrick Avenue • Chicago 51, Illinois
VANDERCOOK PRE-PRESS SYSTEM —CUTS COSTS!

Make Perfect Miters...Faster!
with the New
NOLAN Miter-Master



A *complete* portable unit with all deluxe features including automatic clamp, fancy border attachment, safety guards and worklight. Priced surprisingly low. Write for quotation.
NOLAN CORPORATION
1331 East Dominick St.
ROME, NEW YORK
Builders of BETTER Equipment for BETTER Printing

NEWSPAPER & PRINTING PLANT ENGINEERING
NEW BUILDINGS • MODERNIZATION
SURVEYS • CONSULTATION
ROBERT W. DICKERSON
2063 EAST 4TH STREET • CLEVELAND 15, OHIO

WILLIAM HIGGINS & SONS, INC. 143-151 Perry St. • Buffalo 3, N. Y. • CL 1511

HAULERS • RIGGERS • MACHINERY DISMANTLING and ERECTION • CRANE SERVICE • WINCH

TRUCKS • FLATBED TRAILERS • TRACTORS and CARRYALL TRAILERS OF ALL SIZES

WAREHOUSE WITH RAILROAD SIDING

MEMBER LOCAL CARTAGE NATIONAL CONFERENCE — COMPLETE INSURANCE COVERAGE

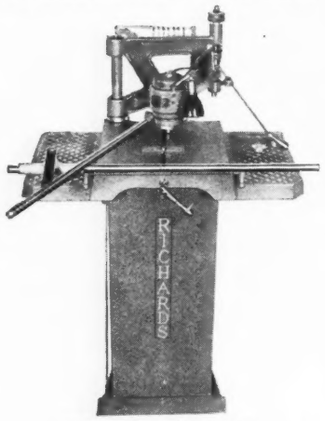
Salvage of Silver Waste

—M. S. Kantrowitz, Chairman, Research Committee, Washington, (D. C.) Club of Printing House Craftsmen.

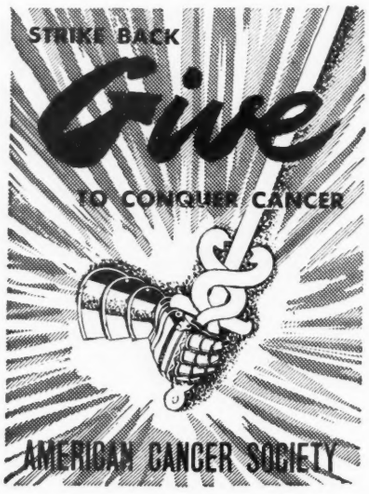
THE highly successful silver spray process for making electrotype molds electrically conductive, has been in operation in the Government Printing Office for several years. Only a portion of the sprayed silver is deposited on the molds, some being lost as drainage waste. Research was, therefore, conducted for the purpose of salvaging this waste silver.

Basically, there are three methods of recovery: filtering (by pressure or vacuum), centrifuging, and settling with subsequent decantation of the liquid portion. An investigation of the comparative merits of these methods was made. It was found that the waste, consisting of silver and water, could be piped into a 100 gal. filter tank from which the water might be siphoned or drained and silver sludge periodically removed and stored. The separator is a drum with a funnel-shaped lower part, 4 ft., 4 in. high from the floor, the diameter of the top measuring 20 in. The diameter of the lower part or tip of the funnel at the bottom is about 5 in. This part contains a screw thread stopper which, upon being removed, allows the sludge to be very easily taken out. Separation is effected by means of a ½ in. steam pipe which feeds into the tank for about 15 min., which is sufficient time to bring the waste mixture to a boil. The steam is then shut off, the sludge drops to the bottom, and the waste water is drained off by means of a pipe set higher in the drum than the sludge container bottom of the funnel. The sludge is then removed from the container and sent to the U. S. Mint where the silver is recovered.

RICHARDS ROUTERS—
Produce Extra Profits



(PMR) illus. $465.00
Full Page Capacity Router—Planer—Mortiser
ROUTERS
Radial—Tubular—Semicurves
$175.00 up
J. A. RICHARDS CO. • Kalamazoo, Mich.



Forms Newspaper Club

Mechanical superintendents and foremen of several New York City daily newspapers have formed an organization devoted to the advancement of newspaper production and printing. Appointed secretary of the group is Nicholas J. Miranda, Mechanical Superintendent of the Long Island *Press* and *Star-Journal*.

1951 Stamp Contest

THE International Association of Printing House Craftsmen, Inc., is again sponsoring a Poster Stamp Contest in order to stimulate activity in Printing Week to be held January 14-20, 1951. The contest is open to anyone interested in the Graphic Arts, but all entries should be cleared through local Craftsmen's Clubs. The design selected as the winner will be the official poster stamp for the 1951 observance of International Printing Week. All designs must be finished drawings, 3 in. by 3⅜ in.—sketches will not be accepted. A cup, suitably inscribed will be awarded the winner of the contest. The next nine runner-ups will receive honorable mention certificates. Awards will be made at the International Convention to be held in Chicago in September. Stamp Contest Chairman is John A. Waryn, 1312 Golf Ter., Union, N. J.

The club meets once a month with the chairmanship on a rotating basis. There are no elections or officers. Plant visitations and speakers are being planned for future programs.

Charter members of the organization are: Thomas McGarry, New York *Times*; Joseph Lawlor, New York *Herald Tribune*; Samuel Varley, New York *Daily News*; Michael Hodgins, *Daily Mirror*; Arthur Kojan, New York *Journal American*; William Ussher, New York *World Telegram* and *Sun*; Arthur Weiss and John Anderson, New York *Post-Home News*; Mr. Miranda and John McGann, Long Island *Daily Press*; John Coloe, Long Island *Star-Journal*; Stephen Lambert and Harry Zowader, Brooklyn *Eagle*; John McMahon, *Wall Street Journal*; Nicholas Rigas, *Journal of Commerce*; John Wilson, *Il Progresso Italo-Americano*; Frank Banci, *Morning Telegraph*, and Henry Dodds, *Racing Form*.

BEN SHULMAN ASSOCIATES, INC.
500 Fifth Avenue
New York 18, N. Y.
BRyant 9-1132

★ **NEWSPAPER PRESSES** *BOUGHT & SOLD* **PRINTING EQUIPMENT**

★ **PLANT LAYOUT MECHANICAL PRODUCTION SERVICE** *AT YOUR DISPOSAL*

★ **COMPLETE PLANTS EQUIPPED** *LARGE OR SMALL*

CLASSIFIED ADS ALL CLASSIFICATIONS

$.75 per line 1.9/16" wide. Minimum ad 5 lines, 29 characters per line. Cash with order.

CLOSING DATE—15th of Month preceding Date of Issue.

We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

HELP WANTED

Southwestern commercial plant planning installation of foundry for rubber, plastic, electro and stereo plates is seeking applications for working foreman qualified to specify equipment, plan plant layout and produce high quality plates from new equipment. Permanent position with splendid opportunity for sincere intelligent man. Replies should state age, family status, past ten year experience and contain references as to capability. All replies held confidential. Present employers will not be contacted without permission of applicant. Box 348, Printing Equipment Engineer.

HELP WANTED

Experienced Engineer in the field of printing. Must have thorough knowledge of printing equipment and various methods of printing with experience in development and converting work to meet production requirements. This is a real opportunity for the right man to prove his technical and organizational ability to top management. Plant is located in the Chicago area. Reply in detail including experience, education and enclose a recent photo. Printing Equipment Engineer Box 349.

HELP WANTED

STEREO WORKING FOREMAN for western metropolitan daily newspaper in midst of fine hunting and fishing area. Night work. Require experienced man who must know foreman's rights, and be capable of running department efficiently. Union. In replying, state age, marital status, employment history over past five years or more, name of at least three newspaper executives as references, and salary expected. Box 345 Printing Equipment Engineer

FOR SALE

For Sale, Hoe Rotogravure Web Press Units: used, good running condition: 5 units for 68 Inches width web; 2 Units for 58 inches width web; **produces monotone or multi-color for converting or publication printing; also newspaper and magazine folders available. Can be inspected.** Box 347, Printing Equipment Engineer.

FOR SALE

Cutler-Hammer two-motor full automatic newspaper press drives and control panels. 220 volt, 3 phase, 60 cycle AC. Complete with resistors and push button stations.

Two 75/7 ½ H.P. crosshead type, equipped to parallel, pair will power 4 or 5 unit press.

One 40/3 H.P. faceplate type, will power 4 decks single width, quad or 16 page tubular, press.

Used, serviceable, recently withdrawn from service, reasonably priced, immediately available.

The Eastern Color Printing Company
Waterbury 20, Conn.

FOR SALE

Model 28 Linotype, serial 50,000, 42 picas, Quadder, Mohr Saw, electric pot, four 72-chan. main mags, four 34-chan. auxiliary mags. Exceptionally low price for quick deal. AMERICAN PRINTING MACHINERY CO., INC., 88 Gold Street, New York 7, N. Y.

FOR SALE

LINOTYPES, Models 5, 8, 14, 19, K and 3; Intertypes, Models B, E and X; casting boxes, melting furnaces; Rouse Band Saw with Jaws, year old; Tramrail Carrier Hoist, Bridges, Controls and Motors for loads to 3,000 pounds, with about 300 feet of track. W. J. WISE, 32 Blvd. of Allies, Pittsburgh, Pa. Phone, ATlantic 1-9754.

Help Wanted

AD MAN or operator wanted — preferably combination. Housing available for family man. Union shop. Write Foreman, The Times Co., Marietta, Ohio.

PRINTING SPECIALIST,

successful in production cost reduction through research and machine development seeks new connection with printing or paper converting firm. Reply Box 346, Printing Equipment Engineer.

SAFETY·RELIABILITY·ECONOMY
CLINE
PRESS DRIVES and CONTROL
Reels, Tensions and Pasters...
CLINE SYSTEM
CLINE ELEC. MFG. CO.
Chicago: 400 West Madison St.
New York: 220 East 42nd Street
San Francisco: 410 Bush Street

WEB DRYING APPARATUS
for ROTOGRAVURE · WEB-OFFSET · ANALINE LETTERPRESS
B. OFFEN & CO.
168 N. Michigan Ave. Chicago 1, Illinois

WE HAVE COMPOSING MACHINE KNOW HOW
We sell PARTS - ACCESSORIES - REBUILDING
MONTGOMERY COMPANY, Inc.
TOWANDA, PA.

Appraisals • Surveys • Labor-Saving Recommendations
Robt. Royden Greer
Printing Engineer
3723 WILSHIRE BLVD. LOS ANGELES 5, CALIF.
Engineering • Plant Layout • Production • Management

100% AUTOMATIC SLUG SAWING
Odd measure slugs sawed to any measure as ejected from linecasting machine. Fast-accurate-economical.
MOHR LINO-SAW CO.
128 N. Union St. Chicago
MOHR SAW

★ STAR CUT CEMENT ★
Since 1936 — For Mounting — Since 1936
CUTS. .STEREOTYPES...ELECTROTYPES
65c per tube-$5.50 per doz. $5.00 per doz. in two doz. lots, $4 50 per doz. in gross lots.
★ STAR CEMENT COMPANY ★
45 Malone Avenue, BELLEVILLE 9, N.J.

Installs Hoe Press Units—Installation of eight Hoe press units has begun at the Los Angeles *Mirror* as the principal part of a mechanical expansion program totalling over $900 thousand. F. L. Yeager, Mechanical Supt. of the *Mirror*, is shown inspecting one of the copies just off one of the Hoe units. Watching Mr. Yeager from left to right are Ray Willoughby, Western Sales Manager of R. Hoe and Co., and Art Randall, Pressroom Supt. of the *Mirror*. When the new units have been added, the *Mirror* will have four complete 128 page tabloid presses. Other equipment which has been ordered includes four Linotypes, two Intertypes, three ad benches, two Hammond Trim-O-Saws, 20 makeup tables, a Wood heavy duty plate shaver, and a Wood automatic casting box.

Ice Queen Starts Press—Barbara Ann Scott, Olympic figure skating champion, started the press run on a Goss Duplex Dek-A-Tube press recently installed at the Owen Sound (Ont., Can.) *Daily Sun-Times*. Shown in the picture from left to right are: Glenn Morrison, machinist; Arthur Glass, Head Pressman; Ken Scott, Assistant Pressman; E. R. Larke, Goss erector, and Miss Scott. The new *Sun-Times* Dek-A-Tube is a 24 page tubular press equipped for color printing.

Acquires Roller Plant

H. N. Love, President of Ideal Roller & Mfg. Co., has announced the acquisition of the Typrene Roller Co. in Los Angeles. According to Mr. Love, several months will be required to equip the Los Angeles factory for the manufacture of Ideal's products. California personnel will continue to serve the Pacific coast area and Ideal's Chicago plant will continue as the service point for the West. The Typrene plant will also continue to serve its present customers.

H. N. Love, President of Ideal Roller & Mfg. Co., announces acquisition of Los Angeles roller factory.

ADVERTISERS' INDEX FOR APRIL 1950

P. E. E. REPRESENTATIVES

WILLIAM L. OSBORN, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone MUrray Hill 6-5980.

EUGENE A. POWERS, Midwest Manager, 612 N. Michigan Ave., Chicago 11, Ill. Phone: SUperior 7-2444.

American Roller Co. . . . 53
American Type Founders . . . 8, 9

Baum, Russell Ernest . . . 2
Bingham's, Sam'l, Son Mfg. Co . . . 4
Booth, E. A., Rubber Co . . . 66
Burgess Cellulose Co . . . 55

Certified Dry Mat Corp . . . 62
Challenge Machinery Co., The . . . 63
Chapman Electric Neutralizer Co . . . 69
Chemco Photoproducts Co., Inc . . . 18
Cline Electric Mfg. Co . . . 71
Cromwell Paper Co . . . 61

Dexter Folder Co . . . 14
Dickerson, Robert W . . . 69

Eastern Newspaper Supply, Inc . . . 21
Edes Mfg. Co., The . . . 56
Electric Boat Co., Printing Machinery Div . . . 52

Goss Printing Press Co., The . . . 26
Graphic Arts Div., Eastman Kodak Co . . . 49
Greer, Robt. Royden . . . 71

Hammond Machinery Builders, Inc . . . Inside back cover
Haney, The, O. C., Co . . . 66
Harris-Seybold Co . . . 15
Herrick, William C., Ink Co., Inc . . . 68
Higgins, William & Sons, Inc . . . 70
Hoe, R. and Co., Inc . . . 10

Imperial Type Metal Co . . . 59, 65
International Printing Ink Div., Interchemical Corp . . . 11
Intertype Corporation . . . Outside back cover

Kemp, The C. M., Mfg. Co . . . 20
Klingrose Gravure Div., American Type Founders . . . 16

Lake Erie Engineering Corp . . . 23
Lanston Monotype Machine Co . . . 17
Linotype Parts Co . . . 22, 60, 65
Ludlow Typograph Co . . . 7

Matrix Contrast Corp . . . 28
Mergenthaler Linotype Co . . . 45, 47
Miehle Printing Press & Mfg. Co . . . 25
Miller Printing Machinery Co . . . 3
Mohr Lino-Saw Co . . . 71
Monomelt Co., The, Inc . . . 58
Montgomery Co., Inc . . . 71
Morrison Co., The . . . 57

National Lead Co . . . 61
New England Newspaper Supply Co . . . 68
New Era Mfg. Co . . . Inside front cover
New Products Div., The Beveridge Paper Co . . . 65
Nolan Corporation . . . 69

Offen, B., & Co . . . 71
Ohio Roller Co . . . 69

Paper Manufacturing Co . . . 63
Printing Plate Supply Co . . . 66

Richards, J. A., Co . . . 70
Rosback, F. P., Co . . . 64
Rouse, H. B., & Co . . . 54

Scott, Walter & Co . . . 6
Shulman, Ben, Associates, Inc . . . 70
SKF Industries, Inc . . . 24
Sta-Hi Corp . . . 1
Standard Process Corp . . . 67
Star Cement Co . . . 71
Strong Electric Corp . . . 27
Surface Combustion Corp . . . 67
Syntron Company . . . 62

Timken Roller Bearing Co., The . . . 12
Tingue, Brown & Co . . . 19

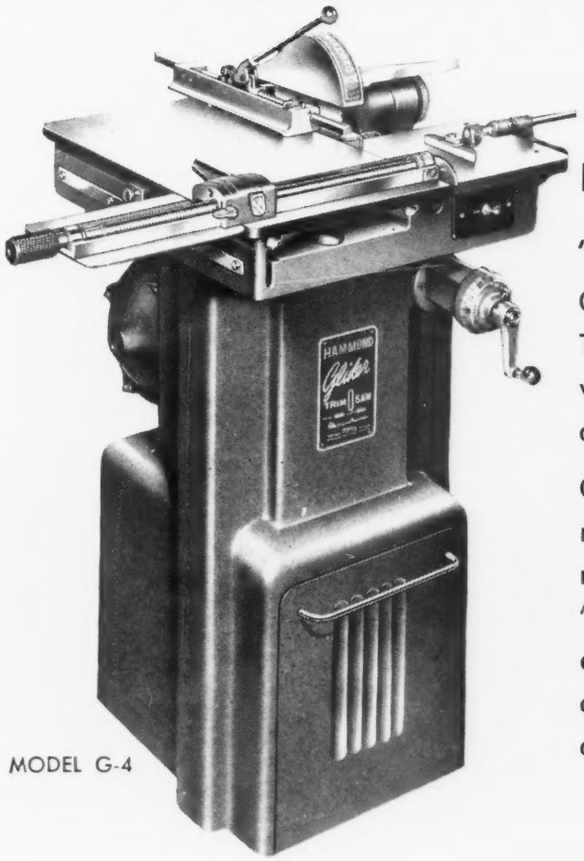
Vandercook & Sons, Inc . . . 69
Vulcan Proofing Co . . . 67

Wetter Numbering Machine Co . . . 62
Wood Flong Corp . . . 67
Wood Newspaper Machinery Corp . . . 13

Production and Mechanical Executives are invited to submit to the editor informally in a letter devices which have helped production in their plants.

Step up and saw

with a Hammond TRIMOSAW



MODEL G-4

HAMMOND *Glider* TRIMOSAW

"THE SAW WITH THE BALL BEARING TABLE"

GLIDER ACTION . . . smooth, powerful, fast! The ball bearing table and the 1 HP motor provide the fastest, easiest sawing ever enjoyed on a printer's saw.

GLIDER ACCURACY . . . every part is precision made to produce precision work for you. All moving parts have wear take-up to insure you "new machine" performance and accuracy indefinitely. The Glider TrimOsaw saves you time and money through speedy operation and accurately sawn materials.

HAMMOND *Mercury* TRIMOSAW

"THE SAW WITH THE BALL BEARING GAUGE"

MODEL M-9

HAMMOND *Ben Franklin* TRIMOSAW

"FINEST QUALITY SAW IN THE LOW PRICE FIELD"

MODEL BF-10

Hammond Machinery Builders INC.

1604 DOUGLAS AVENUE • KALAMAZOO, MICHIGAN

Very Important Character

a

a — plenty of space— no ink traps — close fitting

The lower-case "a" in Intertype Regal is a very important character. Note its design:
the ball swings around in just the right way,
leaving plenty of space above and below.
No ink traps here in these generous counters.
Then the tail comes close to the stem for close fitting.
In all, this small "a" contributes its full share to the readability of Intertype Regal . . .
and readability is important—important to *you*.

10 POINT REGAL

THIS MAN is important, too. As a member of your public he passes each day on the readability of your paper. But this man's no layman—he's an eye specialist. Here is what he wrote to his newspaper when it switched to Intertype Regal:

. . . "The new type will benefit that large portion of humanity which reads THE CHICAGO TRIBUNE. The larger the type, the less eye strain and consequently fewer headaches. Therefore the eyesight and general health of the community will be improved by the change."

Thinking of improving your type dress? Call in your Intertype man —or write to the nearest Intertype office for complete Regal showings.

8 POINT REGAL NO. 1

Intertype

ENLARGED FROM 14 POINT

Brooklyn 2, N. Y.
Chicago 5, Ill.
San Francisco 11, Cal.
Los Angeles 15, Cal.
New Orleans 10, La.
Boston 10, Mass.

The Intertype FOTOSETTER* Photographic Line-Composing Machine

WILL BE ON PUBLIC DISPLAY FOR THE FIRST TIME

AT THE GRAPHIC ARTS EXPOSITION IN CHICAGO SEPTEMBER 11-23

*Trademark Registered